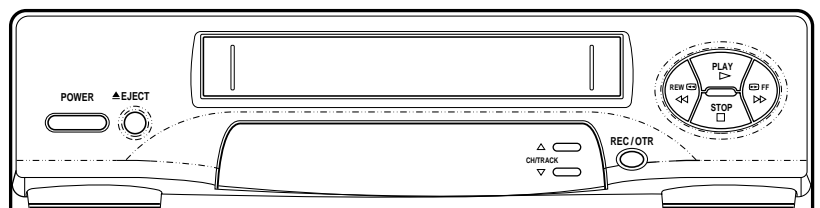


**DAEWOO**

# Service Manual

**MODEL : DV-F462N/262N  
DV-F482N/282N  
DV-F542N/342N  
DV-F442N/242N/X**

**NEW PCB Model of  
DV-F46N/26N  
DV-F48N/28N  
DV-F54N/34N  
DV-F44N/24N/X**



**DAEWOO ELECTRONICS CO., LTD.**

# SPECIFICATIONS

---

Power Source:	120V 60Hz
Power Consumption:	Approx. 17 watts
Temperature:	41°F to 104°F
Television System:	USA-525 lines, 60 fields NTSC standard
Video Signal System:	NTSC type color signal
Video Recording System:	Luminance: FM azimuth recording color phase shift and converted subcarrier direct recording
Scanning System:	Rotary, slant azimuth, helical scanning system, 2 head, 4 head double Azimuth
Tuner:	181 Channel Freq. Synthesized VHF : 2-13 UHF : 14-69 CATV: 14-36(A)-(W), 37-59(AA)-(WW), 60-85(AAA)-(ZZZ), 86-94(86)-(94), 95-99(A-5)-(A-1), 100-125(100)-(125), 01(5A)
Audio Track:	1 Track
Tape Speed:	SP: 1-5/16"/sec. LP: 2 1/32"/sec. EP: 7/16"/sec.
Visual Search Speed:	SP-3 X Normal Speed LP-5 X Normal Speed EP-5 X Normal Speed
Record/Playback Time:	Max. 8 Hours T-160 at EP
FF/REW Time:	Less than 5.0 min. with T-120 tape
Heads:	Video: 2 rotary heads (VR-4250), 4 head double azimuth (VR-4450) Audio/Control: 1 stationary head Erase: 1 full track erase
Modulator:	Signal Strength: 66 dBμ/75 ohm
RF Channel Output:	Channel 3 or 4, switchable
Input Level:	Video: 1.0Vp-p 75 ohm (RCA) Audio: -8dB/50K ohm (RCA)
Output level:	Video: 1.0Vpp 75 ohm (RCA) Audio: -6dB/1K ohm (RCA)
Weight:	9.1 Lbs
Dimensions:	14.2(W) X 12.3(D) X 3.5(H) Inches

## • Safety Check after Servicing

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts and wires have been returned to original positions. Afterwards, perform the following tests and confirm the specified values in order to verify compliance with safety standards.

### 1. Insulation resistance test

Confirm the specified insulation resistance or greater between power cord plug prongs and externally exposed parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See table below.

### 2. Dielectric strength tes

Confirm specified dielectric strength or greater between power cord plug prongs and exposed accessible parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.) See table below.

### 3. Clearance distance

When replacing primary circuit components, confirm specified clearance distance (d), (d') between soldered terminals, and between terminals and surrounding metallic parts. See table below.

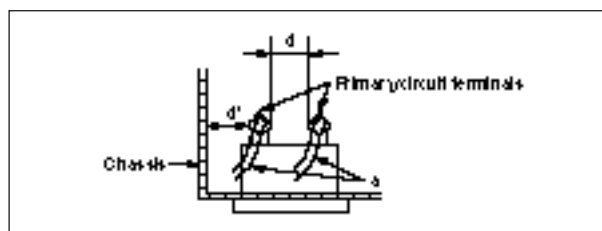


Table 1: Rating for selected areas

AC Line Voltage	Region	Insulation Resistance	Dielectric Strength	Clearance Distance (d), (d')
100V	Japan	$\geq 1 \text{ M}\Omega/500 \text{ V DC}$	1kV 1 minute	$\geq 3 \text{ mm}$
110 to 130V	USA & Canada	---	900V 1 minute	$\geq 3.2 \text{ mm}$
* 100 to 250 V	South America	$\geq 10 \text{ M}\Omega/500 \text{ V DC}$	4 kV 1 minute	$\geq 6 \text{ mm (d)}$ $\geq 8 \text{ mm (d')}$ (a: Power cord)

**Note:** This table is unofficial and for reference only. Be sure to confirm the precise values for your particular country and locality.

### 4. Leakage current test

Confirm specified or lower leakage current between B (earth ground, power cord plug prongs) and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.)

Measuring Method: (Power ON)

Insert load Z between B (earth ground, power cord plug prongs) and exposed accessible parts. Use an AC voltmeter to measure across both terminals of load Z. See figure and following table.

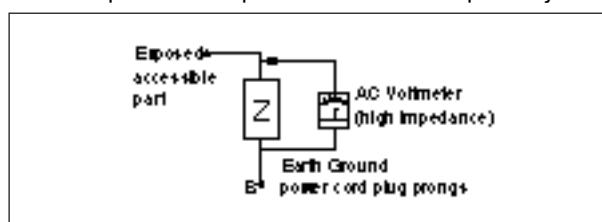


Table 2: Leakage current ratings for selected areas

AC Line Voltage	Region	Load Z	Leakage Current (i)	Earth Ground (B) to:
100V	Japan		$i \leq 1 \text{ m A rms}$	Exposed accessible parts
110 to 130 V	USA & Canada		$i \leq 0.5 \text{ m A rms}$	Exposed accessible parts
100 to 130 V 200 to 250 V	South America		$i \leq 0.7 \text{ m A peak}$ $i \leq 2 \text{ m A dc}$	Antenna earth terminals
			$i \leq 0.7 \text{ m A peak}$ $i \leq 2 \text{ m A dc}$	Other terminals

**Note:** This is table unofficial and for reference only. Be sure to confirm the precise values for your particular country and locality.

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## KEY TO ABBREVIATIONS

A	AC	: Alternating Current	G	FSC	: Frequency Sub Carrier	S	REEL S	: Reel Sensor
	A/C	: Audio/Control		FWD	: Forward		REF	: Reference
	ACC	: Automatic Color Control	H	GND	: Ground		REW	: Rewind
	A.E.	: Audio/Erase		H.P.F	: High Pass Filter		REG	: Regulated, Regulator
	AFC	: Automatic Frequency Control		H.A.SW	: Head Amp Switch		RF	: Radio Frequency
	AFT	: Automatic Fine Tuning		H. SYNC	: Horizontal Sync.		SEL	: Select, Selector
	AGC	: Automatic Gain Control	I	IF	: Intermediate Frequency		SIF	: Sound Intermediate Frequency
	AMP	: Amplifier					SP	: Standard Play
	ANT	: Antenna	L	LED	: Light Emitting Diode		STB	: Serial Strobe
	APC	: Automatic Phase Control		LIMIT	: Limiter		SVC	: Service
B	BGP	: Burst Gate Pulse		LM	: Loading Motor		SW	: Switch
	B.P.F	: Band Pass Filter		LOAD	: Loading		SYNC SEP	: Sync Separator, Separation
	B/W	: Black and White		LP	: Long Play	T	TR	: Transistor
C	CAP	: Capstan		L.P.F	: Low Pass Filter		TRACK	: Tracking
	CAR	: Carrier		LUMI	: Luminance		TRICK	: Trick Playback
	CCD	: Charged Coupled Device	M	MM	: Monostable Multivibrator		TP	: Test Point
	CH	: Channel		MOD	: Modulator, Modulation	U	UNREG	: Unregulated
	CLK	: Clock		MS SW	: Mech State Switch	V	VCO	: Voltage Controlled Oscillator
	COMP	: Comparator	N	NC	: Non Connection		VIF	: Video Intermediate Frequency
	C ROTARY	: Color rotary	O	OSC	: Oscillator		VFD	: Vacuum Fluorescent Display
	C SYNC	: Composite Sync		OSD	: On-Screen Display		VR	: Variable Resistor
	CONV	: Converter	P	PB	: Playback		V-SYNC	: Vertical-Synchronization
	CTL	: Control		PB-C	: Playback-Chrominance		VXO	: Voltage Controlled Oscillator
	CYL	: Cylinder		PB-Y	: Playback-Luminance	Y	Y/C	: Luminance/Chrominance
D	DC	: Direct Current		PCB	: Printed Circuit Board			
	DC ENVE	: DC Envelope Voltage		PG	: Pulse Generator			
	DET	: Detector		PIF	: Picture Intermediate Frequency			
	DEV	: Deviation		PLL	: Phase Lock Loop			
	DOC	: Drop-Out Compensation		PS	: Phase Shift			
E	EE	: Electric to Electric		PWM	: Pulse Width Modulation			
	EP	: Extended Long Play	Q	Q.V.	: Quasi Vertical Sync			
	EQ	: Equalizer	R	REC	: Recording			
F	FG	: Frequency Generator		REC-C	: Recording-Chrominance			
	FM	: Frequency Modulation		REC-Y	: Recording-Luminance			

## PREVENTIVE CHECKS AND SERVICE INTERVALS

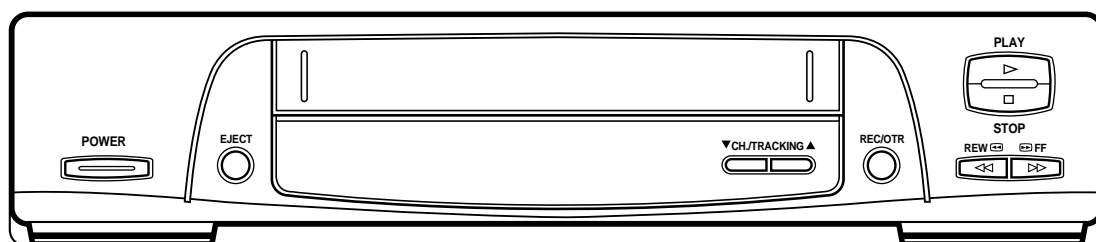
PARTS NAME	TIME (OPERATING HOURS)				
	1000	2000	3000	4000	5000
DRUM ASS'Y	<i>fN</i>	O	<i>fN</i>	O	<i>fN</i>
CAPSTAN MOTOR		O		O	
L/C BRKT ASS'Y		O		O	
REEL BELT		O		O	
IDLER PLATE ASS'Y		<i>fN</i>		O	
REEL TABLE			O		
T-SUB BRAKE ASS'Y		O		O	
BAND BRAKE ASS'Y		O		O	
S-MAIN BRAKE ASS'Y		O		O	
T-MAIN BRAKE ASS'Y		O		O	
PINCH ROLLER ASS'Y		<i>fN</i>	O	<i>fN</i>	
AC HEAD ASS'Y			O		
FE HEAD					O
REEL GEAR ASS'Y		<i>fN</i>		O	

\* : CHECK, CLEAN      O : REPLACE

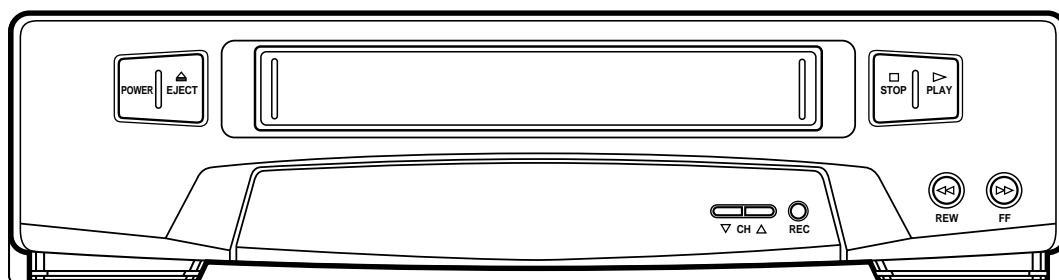
# CONTROLS AND FUNCTIONS

## FRONT

DV-F462/262N

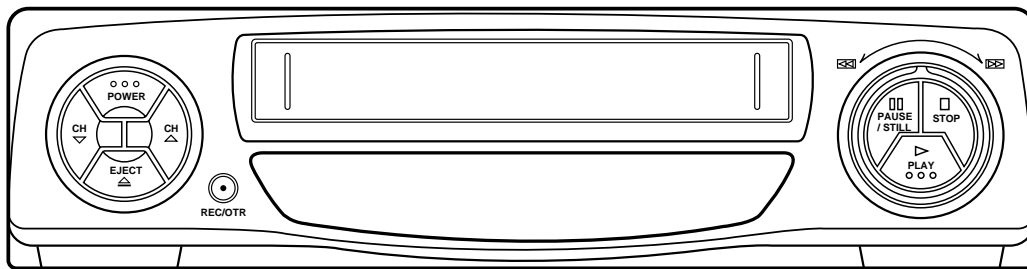


DV-F482/282N



## FRONT

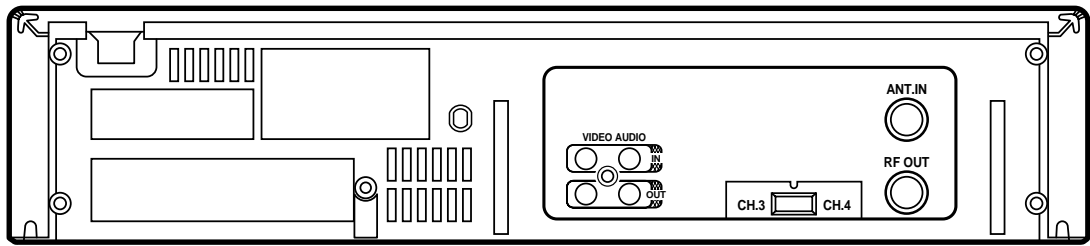
### DV-F542/342N



### DV-F442/242N/X



## REAR





# ELECTRICAL ADJUSTMENTS

## ADJUSTMENT PROCEDURES

Read and perform these adjustments when repairing the circuits or replacing electrical parts or PCB assemblies.

**CAUTION:** Inferior silicon grease can damage transistors. When replacing transistors, use only specified silicon grease. Remove all old silicon before applying new silicon.

### 1. PG SHIFTER

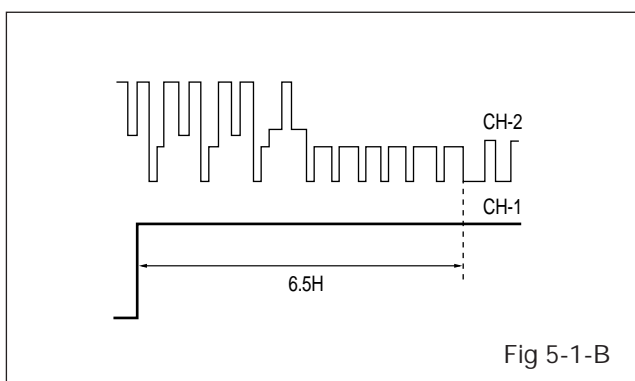
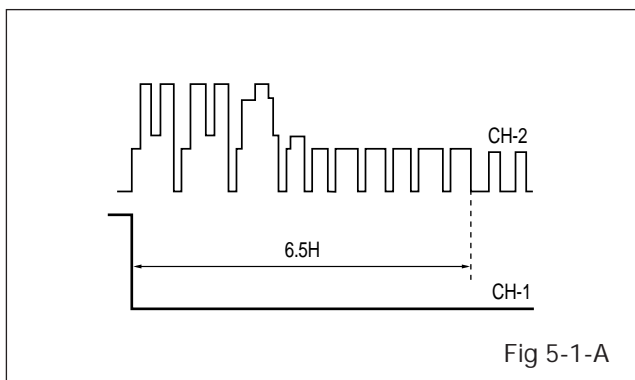
CONDITIONS

MODE-PLAYBACK

Input Signal-Alignment Tape (DN-1).

#### INSTRUCTIONS

1. Connect CH-1 on the oscilloscope to pin ② of PT01 and CH-2 to Video output JACK.
2. Adjust R595 so that the waveform of the oscilloscope measures  $6.5 \pm 0.5(H)$  at both leading and trailing edges. (Refer to Fig. 5-1-A, B)



### 2. COMB FILTER

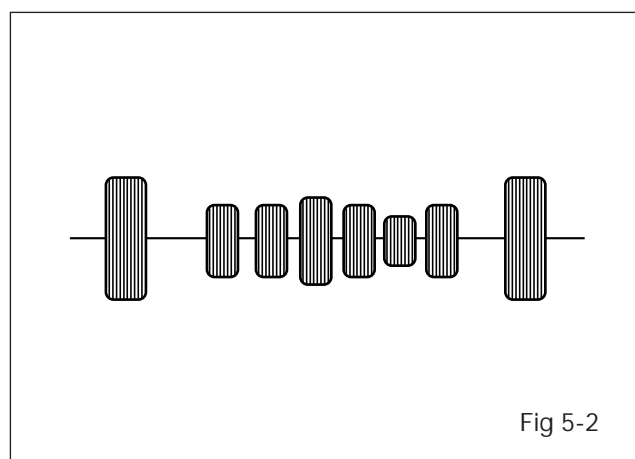
CONDITIONS

MODE-STOP

Input Signal-NTSC Multiburst (VIDEO IN JACK)

#### INSTRUCTIONS

1. Connect the video signal generator to VIDEO IN JACK.
2. Connect CH-1 on the oscilloscope to TJ303 and CH-2 to TJ304.
3. Trigger the scope with CH1.
4. Adjust R494 until the 3.58MHz component of multiburst signal becomes minimum. (Refer to Fig. 5-2)



### 3. AUDIO BIAS

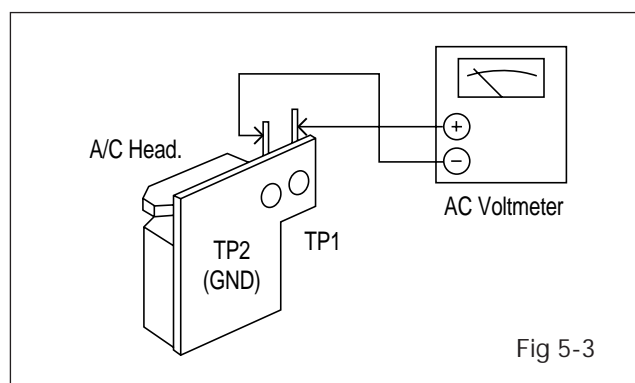
CONDITIONS

MODE-RECORD (SP MODE)

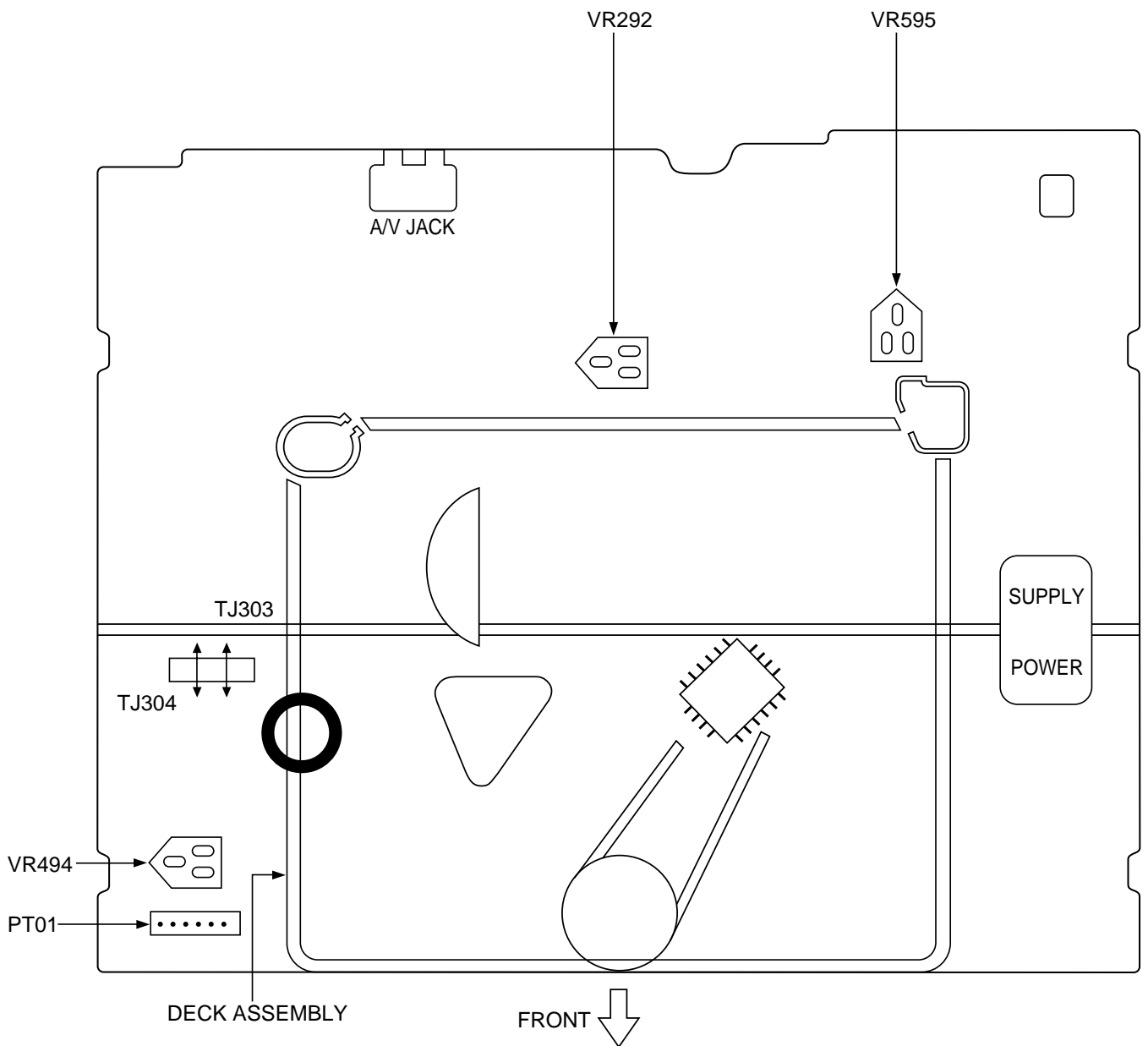
Input Signal-Audio Signal : No Signal

#### INSTRUCTION

Connect the AC voltmeter as shown, then adjust the voltage to  $3.0 \pm 0.1 \text{ mVrms}$  with R292 (Refer to fig. 3-6).



## MAJOR COMPONENTS LOCATION GUIDE



# BLOCK DIAGRAMS

---

VIDEO



2HD PRE-AMP



4HD PRE-AMP



AUDIO



SYSCON/SERVO/TIMER & LOGIC



OSD





PIF & INPUT



POWER

# PRINTED CIRCUIT BOARDS

---

MAIN PCB



LOGIC PCB

DV-F462N/262N

DV-F482N/282N

---

DV-F542N/342N

DV-F442N/242N/X



HEAD AMP PCB

# SCHEMATIC DIAGRAMS

---

4HD VIDEO SCHEMATIC



2HD VIDEO SCHEMATIC





4HD PREAMP SCHEMATIC



2HD PREAMP SCHEMATIC



AUDIO SCHEMATIC



LOGIC SCHEMATIC

---

## LOGIC SCHEMATIC (DV-F542N/F342N)



SYSCON/SERVO/TIMER SCHEMATIC



OSD SCHEMATIC



PIF & INPUT SELECTOR SCHEMATIC





POWER SUPPLY SCHEMATIC (I)



POWER SUPPLY SCHEMATIC (II)

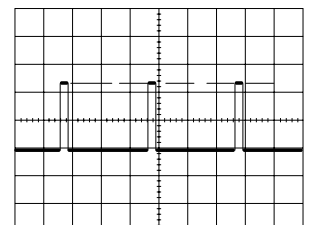
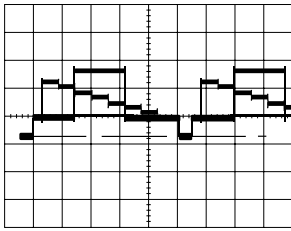


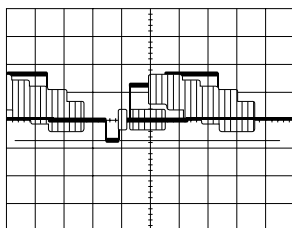
CONNECTION DIAGRAM

# WAVEFORM & VOLTAGE CHART

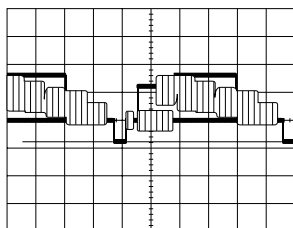
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## LUMA/CHROMA WAVEFORMS

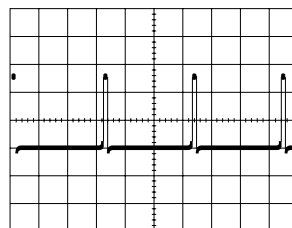




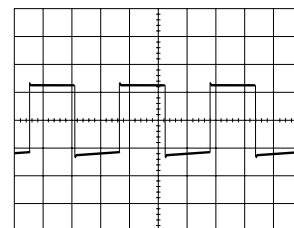
⑪ IC301-28 2.4Vp-p  
1V/10μsec/cm  
REC



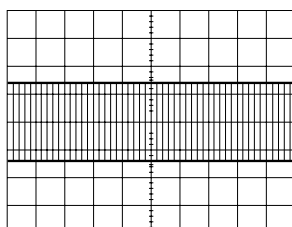
⑪ IC301-28 2.4Vp-p  
1V/10μsec/cm  
PLAY



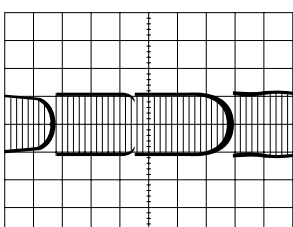
⑫ IC301-29 5.2Vp-p  
1V/5msec/cm  
PICTURE SEARCH



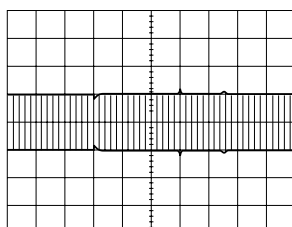
⑬ IC301-30 5Vp-p  
2V/10msec/cm  
REC/PLAY



⑭ IC301-34 1.3Vp-p  
500mV/10μsec/cm  
REC

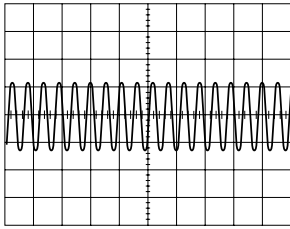


⑮ IC301-35 450mVp-p  
200mV/5ms/cm  
PLAY

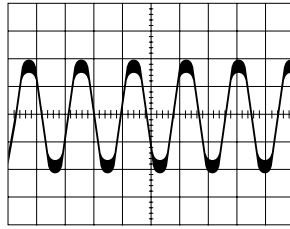


⑯ IC301-36 380mVp-p  
200mV/5μs/cm  
PLAY

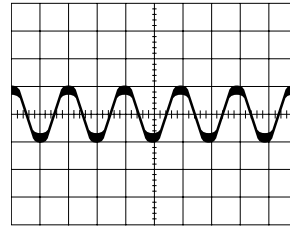
## AUDIO WAVEFORMS



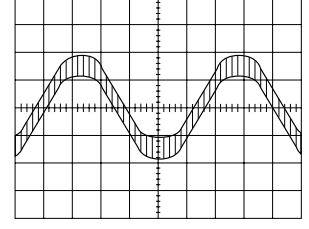
①⑦ IC201-3 44Vp-p  
20V/20μsec/cm  
REC



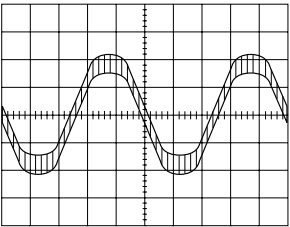
①⑧ IC201-10 170mVp-p  
50mV/0.5msec/cm  
PLAY



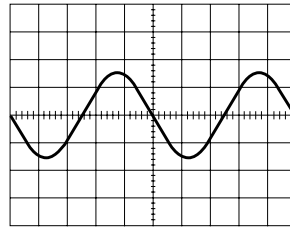
①⑨ IC201-12 90mVp-p  
50mV/0.5msec/cm  
PLAY



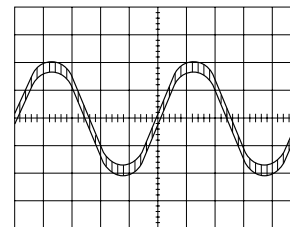
②⑩ IC201-16 130mVp-p  
50mV/0.2msec/cm  
REC



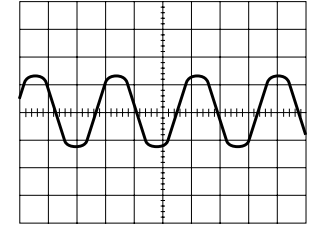
②① IC201-21 1.65Vp-p  
500mV/0.2msec/cm  
REC



②② IC201-22 1.45Vp-p  
500mV/0.2msec/cm  
REC

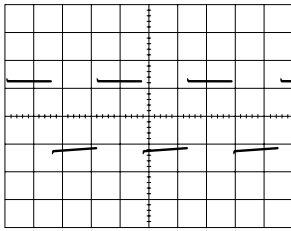


②③ IC202-23 2.2Vp-p  
500mV/0.2msec/cm  
PLAY/PLAY

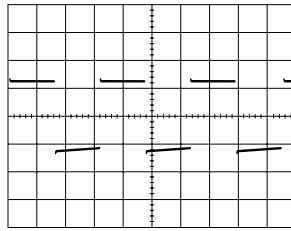


②④ T201-7 23.5Vp-p  
10V/5μsec/cm  
REC

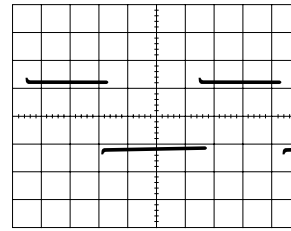
## SERVO WAVEFORMS



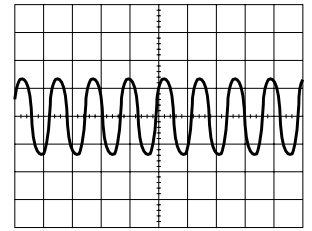
②⑤ IC601-3 5.5Vp-p  
2V/5μsec/cm  
REC/PLAY



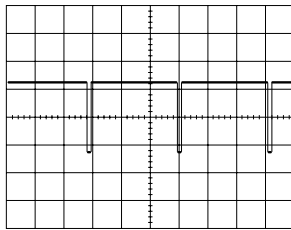
②⑥ IC601-4 5.5Vp-p  
2V/5μsec/cm  
REC/PLAY



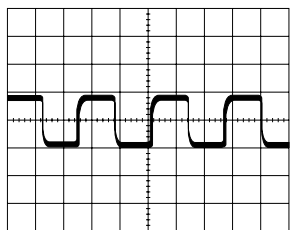
②⑦ IC601-18.5Vp-p  
2V/5msec/cm  
REC/PLAY



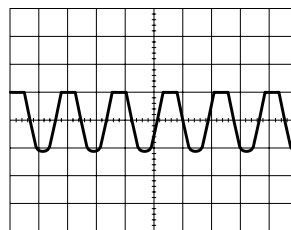
②⑧ IC601-39 5.5Vp-p  
2V/50msec/cm  
REC/PLAY



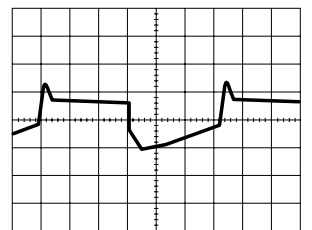
②⑨ IC601-66 2.6Vp-p  
1V/10msec/cm  
REC/PLAY



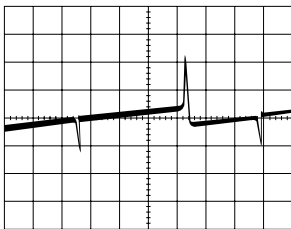
③⑩ IC601-67 850mVp-p  
500mV/0.5msec/cm  
REC/PLAY



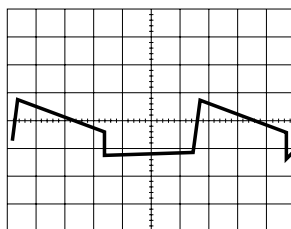
③⑪ IC601-68 1.2Vp-p  
500mV/0.5msec/cm  
REC/PLAY



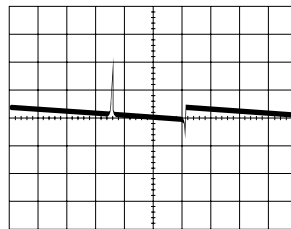
③⑫ IC601-71 4.8Vp-p  
1V/5msec/cm  
REC



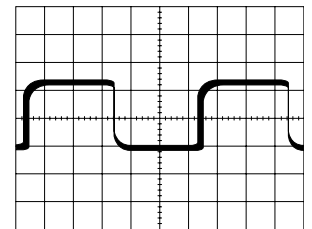
③⑫ IC601-71 3Vp-p  
1V/5msec/cm  
PLAY



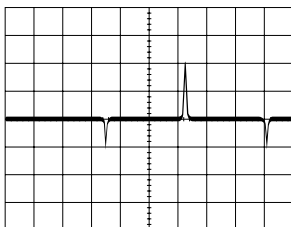
③⑬ IC601-72 4Vp-p  
2V/5msec/cm  
REC



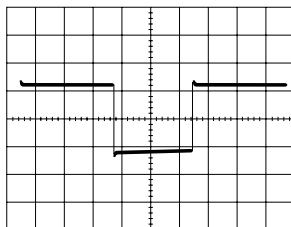
③⑬ IC601-72 3Vp-p  
1V/5msec/cm  
PLAY



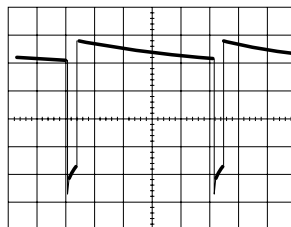
③⑭ IC601-73 4.8Vp-p  
2V/5msec/cm  
REC



③⑭ IC601-73 3Vp-p  
1V/5msec/cm  
PLAY



③⑮ IC601-77 4Vp-p  
2V/5msec/cm  
REC/PLAY



③⑯ P501-2 3Vp-p  
500mV/0.1sec/cm  
SLOW

## SERVO/SYSCON/TIMER VOLTAGE CHARTS

MODE PIN No.	SERVO/SYSCON/TIMER							
	STOP	REC	PLAY	REW/ F.FWD	REV/FWD SEARCH	REC PAUSE	PLAY PAUSE	
IC601								
1	0.0	2.6	3.0	2.6	3.0	5.2	5.2	
2	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
3	0.0	2.6	2.6	2.6	2.6	0.0	5.2	
4	2.7	2.7	2.7	2.7	2.7	2.7	2.7	
5	0.0	1.3	1.3	2.5	1.8	0.0	0.0	
6	0.0	1.3	1.3	2.5	1.8	0.0	0.0	
7	0.0	0.0	0.0	0.0	5.0	0.0	5.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
11	3.6	3.6	3.6	3.6	3.6	3.6	3.6	
12	2.7	2.7	2.7	2.7	2.7	2.7	0.0	
13	5.1	0.0	0.0	0.0	0.0	0.0	0.0	
14	5.0	5.0	0.0	5.0	0.0	5.0	0.0	
15	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2HD
	2.5	2.5	2.5	2.5	2.5	2.5	5.0	4HD
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2HD
	0.0	0.0	5.0	0.0	2.6	0.0	2.5	4HD
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2HD
	0.0	0.0	0.0	0.0	2.5	0.0	2.5	4HD
18	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
21	0.0	0.0	0.0	0.0	5.0	0.0	5.0	
22	5.0	0.0	5.0	0.0	5.0	5.0	5.0	
23	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	5.1	5.1	5.1	5.1	5.1	5.1	5.1	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
29	0.0	0.0	5.0	0.0	5.0	0.0	5.0	
30	4.9	4.9	4.9	4.9	4.9	4.9	4.9	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
37	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
38	2.3	2.3	2.3	2.3	2.3	2.3	2.3	
39	2.3	2.3	2.3	2.3	2.3	2.3	2.3	

MODE PIN No.	SERVO/SYSCON/TIMER							
	STOP	REC	PLAY	REW/ F.FWD	REV/FWD SEARCH	REC PAUSE	PLAY PAUSE	
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
42	0.9	0.9	0.9	0.9	0.9	0.9	0.9	
43	1.2	1.2	1.2	1.2	1.2	1.2	1.2	
44	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
47	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
48	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
50	5.0	5.0	5.0	5.0	5.0	5.0	0.0	
51	5.0	5.0	5.0	5.0	5.0	5.0	0.0	
52	5.0	5.0	0.0	5.0	0.0	5.0	0.0	
53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
56	5.0	5.0	0.0	5.0	0.0	5.0	0.0	
57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
60	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
65	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
66	2.7	2.7	2.7	2.7	2.7	2.7	2.7	
67	2.3	2.3	2.3	2.3	2.3	2.3	2.3	
68	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
69	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
70	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
71	2.7	1.6	2.4	1.6	2.4	2.7	2.4	
72	2.4	3.7	2.5	3.7	2.5	2.4	2.4	
73	2.5	2.8	2.4	2.8	2.4	2.8	2.5	
74	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
75	2.6	2.5	2.5	2.5	2.5	2.6	2.6	
76	2.6	0.0	2.5	0.0	2.5	2.6	2.6	
77	2.6	2.8	2.5	2.8	2.5	2.6	2.5	
78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
81	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
82	5.0	5.0	5.0	5.0	5.0	5.0	5.0	



## SERVO/SYSCON/TIMER VOLTAGE CHARTS

MODE PIN No.	SERVO/SYSCON/TIMER							
	STOP	REC	PLAY	REW/ F.FWD	REV/FWD SEARCH	REC PAUSE	PLAY PAUSE	
83	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
86	2.4	0.0	1.2	0.0	1.2	2.6	1.2	
87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2HD
	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4HD
89	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
90	2.6	2.6	2.6	2.6	2.6	2.6	2.6	
91	4.6	4.6	4.6	4.6	4.6	4.6	4.6	
92	3.7	3.7	0.1	3.7	0.1	3.7	0.1	
93	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
94	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
95	1.4	1.4	1.4	1.4	1.4	1.4	1.4	
96	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
97	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
98	0.0	0.0	2.4	0.0	2.4	0.0	2.4	
99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
IC602								
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
3	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	13	13	13	13	13	13	13	
8	7.5	7.5	7.5	7.5	7.5	7.5	7.5	
9	13	13	13	13	13	13	13	
10	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
IC606								
1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
2	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Q601								
E	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
C	5.7	5.7	5.7	5.7	5.7	5.7	5.7	
B	5.7	5.7	5.7	5.7	5.7	5.7	5.7	
Q608								
E	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
C	0.5	5.0	0.6	5.0	0.5	0.5	0.5	
B	5.0	4.3	5.0	4.3	5.0	5.0	5.0	

MODE PIN No.	SERVO/SYSCON/TIMER							
	STOP	REC	PLAY	REW/ F.FWD	REV/FWD SEARCH	REC PAUSE	PLAY PAUSE	
IC701								
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
5	2.3	2.3	2.3	2.3	2.3	2.3	2.3	
6	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
7	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
8	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
11	-23.6	-23.6	-23.6	-23.6	-23.6	-23.6	-23.6	
12	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	-17.7	-17.7	-21.0	-17.7	-21.0	-17.7	-21.0	
15	-14.6	-14.9	-21.1	-14.9	-21.1	-14.5	-21.0	
16	-14.6	-14.9	-21.1	-14.9	-21.1	-14.5	-21.0	
17	-21.0	-18.1	-24.3	-18.1	-24.3	-17.7	-24.0	
18	-21.0	-21.3	-24.3	-21.3	-24.3	-20.8	-24.0	
19	-21.0	-21.3	-24.3	-21.3	-24.3	-20.8	-24.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	-11.3	-11.6	-8.3	-11.6	-8.3	-11.3	-8.2	
23	-17.7	-18.1	-21.3	-18.3	-21.3	-14.5	-17.7	
24	-21.0	-21.3	-21.0	-21.3	-21.1	-21.0	-20.8	
25	-21.0	-21.3	-24.3	-21.3	-24.3	-24.0	-21.0	
26	-24.2	-24.7	-24.4	-24.7	-24.4	-24.1	-24.2	
27	-24.2	-24.7	-24.4	-24.7	-24.4	-24.1	-24.2	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	-21.1	-21.6	-21.3	-21.6	-21.3	-21.0	-21.1	
31	-21.1	-21.6	-21.3	-21.6	-21.4	-21.0	-21.1	
32	-21.1	-21.6	-21.3	-21.6	-21.3	-21.1	-21.0	
33	-21.2	-21.6	-21.3	-21.6	-21.3	-21.0	-21.1	
34	-21.2	-21.6	-21.3	-21.6	-21.3	-21.0	-21.1	
35	-21.2	-21.6	-21.3	-21.6	-21.4	-21.0	-21.1	
36	-21.2	-21.6	-21.3	-21.6	-21.3	-21.0	-21.1	
37	-21.2	-21.6	-21.3	-21.6	-21.3	-21.0	-21.1	
38	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

## SERVO/SYSCON/TIMER VOLTAGE CHARTS

MODE	SERVO/SYSCON/TIMER							
PIN No.	STOP	REC	PLAY	REW/ F.FWD	REV/FWD SEARCH	REC PAUSE	PLAY PAUSE	
IC702								
1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	5.0	5.0	5.0	5.0	5.0	5.0	5.0	

## AUDIO VOLTAGE CHARTS

MODE	AUDIO							
PIN No.	STOP	REC	PLAY	REW/ F.FWD	REV/FWD SEARCH	REC PAUSE	PLAY PAUSE	
IC201								
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	12.2	12.1	12.3	12.1	12.3	12.2	12.3	
6	5.1	5.1	5.1	5.1	5.2	5.1	5.2	
7	12.3	12.3	12.3	12.3	12.4	12.3	12.4	
8	5.2	5.1	5.2	5.1	5.2	5.2	5.2	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	5.2	5.1	5.2	5.1	5.2	5.2	5.2	
11	0.0	0.0	4.9	0.0	4.9	0.0	4.9	
12	5.7	5.7	5.8	5.7	5.7	5.7	5.8	
13	4.9	4.9	4.9	4.9	4.9	4.9	4.9	
14	0.6	0.6	0.0	0.6	0.0	0.6	0.0	
15	5.8	5.8	5.8	5.8	5.9	5.8	5.9	
16	5.8	5.8	5.8	5.8	5.8	5.8	5.8	
17	5.2	0.0	5.2	0.0	5.2	5.2	5.2	
18	5.8	5.8	5.8	5.8	5.8	5.8	5.8	

MODE	AUDIO							
PIN No.	STOP	REC	PLAY	REW/ F.FWD	REV/FWD SEARCH	REC PAUSE	PLAY PAUSE	
19	5.8	5.8	5.8	5.8	5.9	5.8	5.9	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	5.8	5.8	5.8	5.8	5.9	5.8	5.8	
22	5.8	5.8	5.8	5.8	5.9	5.8	5.9	
23	0.5	5.1	0.5	5.1	0.5	0.5	0.5	
24	0.5	5.1	0.5	5.1	0.5	5.1	0.5	
Q201								
E	0.0	0.3	0.0	0.0	0.0	0.0	0.0	
C	0.3	11.4	0.3	0.3	0.3	0.4	0.3	
B	0.3	0.1	0.3	0.3	0.3	0.4	0.3	
Q202								
E	12.1	12.1	12.1	12.1	12.1	13.0	12.1	
C	0.3	11.9	0.3	0.3	0.3	0.4	0.3	
B	12.1	11.3	12.1	12.1	12.1	13.0	12.1	
Q203								
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
C	12.1	0.0	12.1	12.1	12.1	13.0	12.1	
B	0.6	4.9	0.6	0.6	0.6	0.5	0.0	

## POWER VOLTAGE CHARTS

MODE	POWER							
PIN No.	STOP	REC	PLAY	REW/ F.FWD	REV/FWD SEARCH	REC PAUSE	PLAY PAUSE	
SM801(P)								
1	140.0	140.0	140.0	140.0	140.0	140.0	140.0	
2	140.0	140.0	140.0	140.0	140.0	140.0	140.0	
3	NC	NC	NC	NC	NC	NC	NC	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	-28.3	-28.9	-28.5	-28.9	-28.5	-28.3	-28.3	

MODE	POWER							
PIN No.	STOP	REC	PLAY	REW/ F.FWD	REV/FWD SEARCH	REC PAUSE	PLAY PAUSE	
7	-16.8	-17.3	-17.0	-17.3	-17.2	-17.0	-16.8	
8	-20.4	-20.9	-20.6	-20.9	-20.6	-20.3	-20.3	
SM801(S)								
1	47.5	47.8	47.5	47.8	47.8	47.5	47.8	
2	14.2	14.1	14.2	14.1	14.2	14.2	14.5	
3	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

## POWER VOLTAGE CHARTS

MODE PIN No.	POWER							
	STOP	REC	PLAY	REW/ F.FWD	REV/FWD SEARCH	REC PAUSE	PLAY PAUSE	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	-28.3	-28.9	-28.5	-28.9	-28.5	-28.3	-28.3	
7	-16.8	-17.3	-17.0	-17.3	-17.2	-17.0	-16.8	
8	-20.4	-20.9	-20.6	-20.9	-20.6	-20.3	-20.3	
Q808								
E	13.1	13.1	13.1	13.1	13.1	13.1	13.1	
C	14.2	14.0	14.3	14.0	14.3	14.2	14.4	
B	13.7	13.7	13.7	13.7	13.7	13.7	13.7	
Q809								
E	13.0	13.0	13.1	13.0	13.1	13.0	13.1	

MODE PIN No.	POWER							
	STOP	REC	PLAY	REW/ F.FWD	REV/FWD SEARCH	REC PAUSE	PLAY PAUSE	
C	14.2	14.0	14.3	14.0	14.3	14.2	14.4	
B	13.7	13.7	13.7	13.7	13.7	13.7	13.7	
Q810								
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
C	13.7	13.7	13.7	13.7	13.7	13.7	13.7	
B	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Q811								
E	5.6	5.5	5.5	5.5	5.5	5.5	5.5	
C	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
B	6.3	6.3	6.3	6.3	6.3	6.3	6.3	

## OSD VOLTAGE CHARTS

MODE PIN No.	OSD							
	STOP	REC	PLAY	REW/ F.FWD	REV/FWD SEARCH	REC PAUSE	PLAY PAUSE	
ICS01								
1	2.3	2.3	2.3	2.3	2.3	2.3	2.3	
2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	
3	4.9	4.9	4.9	4.9	4.9	4.9	4.9	
4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
6	4.1	4.1	4.1	4.1	4.1	4.1	4.1	
7	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
8	2.6	2.6	2.6	2.6	2.6	2.6	2.6	
9	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
10	2.6	2.6	2.6	2.6	2.6	2.6	2.6	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

MODE PIN No.	OSD							
	STOP	REC	PLAY	REW/ F.FWD	REV/FWD SEARCH	REC PAUSE	PLAY PAUSE	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	2.3	2.3	2.3	2.3	2.3	2.3	2.3	
17	2.3	2.3	2.3	2.3	2.3	2.3	2.3	
18	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
19	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
20	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
QS01								
E	1.5	1.5	2.5	1.5	2.5	1.5	2.5	
C	0.1	0.1	2.6	0.1	2.6	0.1	2.6	
B	5.4	5.4	2.0	5.4	2.0	5.4	2.0	
QS02								
E	2.6	2.6	2.6	2.6	2.6	2.6	2.6	
C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
B	3.3	3.3	3.3	3.3	3.3	3.3	3.3	

## VIDEO (LUMA/CHROMA) VOLTAGE CHARTS

MODE	VIDEO (LUMA/CHROMA)							
PIN No.	STOP	REC	PLAY	REW/ F.FWD	REV/FWD SEARCH	REC PAUSE	PLAY	
IC301								
1	0.0	0.0	5.0	0.0	5.0	0.0	5.0	
2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
3	2.8	2.8	2.8	2.8	2.8	2.8	2.8	
4	2.0	2.0	4.8	2.0	4.8	2.0	4.8	
5	2.0	2.0	4.8	2.0	4.8	2.0	4.8	
6	3.2	3.2	3.5	3.2	3.6	3.2	3.6	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	4.0	4.0	2.6	4.0	2.6	4.0	2.6	
9	2.1	2.1	2.2	2.1	2.2	2.1	2.2	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
12	2.6	2.6	2.5	2.6	2.5	2.6	2.5	
13	2.6	2.6	2.5	2.6	2.5	2.6	2.5	
14	2.6	2.6	3.5	3.5	2.4	2.6	3.5	
15	2.4	2.4	2.2	2.4	2.2	2.4	2.2	
16	2.1	2.1	2.1	2.1	2.1	2.1	2.1	
17	3.8	3.8	3.8	3.8	3.8	3.8	3.8	
18	2.8	2.8	2.8	2.8	2.8	2.8	2.8	
19	3.8	3.8	1.6	3.8	1.6	3.8	1.6	
20	3.9	3.9	1.6	3.9	1.6	3.9	1.6	
21	1.8	1.8	1.8	1.8	1.8	1.8	1.8	
22	2.0	2.0	3.0	2.0	3.0	2.0	3.0	
23	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
24	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
25	4.2	4.2	4.2	4.2	4.2	4.2	4.2	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
28	0.8	0.8	0.8	0.8	0.8	0.8	0.8	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	2.6	2.6	2.6	2.6	2.6	2.6	2.6	
32	1.6	1.6	2.0	1.6	2.0	1.6	2.0	
33	0.0	0.0	0.4	0.0	0.4	0.0	0.4	
34	3.0	3.0	3.6	3.0	3.6	3.0	3.6	
35	0.0	0.0	3.8	0.0	3.8	0.0	3.8	
36	2.0	1.6	3.7	1.6	3.7	1.6	3.7	
IC302								
1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
2	2.4	2.4	2.4	2.4	2.4	2.4	2.4	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	2.0	2.0	2.0	2.0	2.0	2.0	2.0	

MODE	VIDEO (LUMA/CHROMA)							
PIN No.	STOP	REC	PLAY	REW/ F.FWD	REV/FWD SEARCH	REC PAUSE	PLAY	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	1.3	1.3	1.3	1.3	1.3	1.3	1.3	
9	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
10	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
11	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
12	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
13	10.0	10.0	10.0	10.0	10.0	10.0	10.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Q301								
E	2.8	2.8	3.3	2.8	3.3	2.8	3.3	
C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
B	2.2	2.2	2.0	2.2	2.1	2.2	2.0	
Q302								
E	2.6	2.5	2.4	2.5	2.4	2.6	2.4	
C	5.5	5.4	5.4	5.4	5.4	5.4	5.4	
B	3.1	3.2	3.0	3.2	3.0	3.2	3.0	
Q303								
E	1.5	1.5	2.6	1.5	2.8	1.5	2.9	
C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
B	0.8	0.8	2.0	0.8	2.0	0.8	2.3	
Q304								
E	1.6	1.6	4.4	1.6	4.4	1.6	4.4	
C	0.0	0.0	1.5	0.0	1.5	0.0	1.5	
B	1.6	1.6	3.7	1.6	3.7	1.6	3.7	
Q305								
E	1.6	1.6	1.3	1.6	1.3	1.6	1.3	
C	3.0	3.0	3.5	3.0	3.5	3.0	3.5	
B	2.3	2.3	2.0	2.3	2.0	2.3	2.0	
Q306								
E	3.7	3.7	4.1	3.7	4.1	3.7	4.1	
C	1.8	1.8	1.3	1.8	1.3	1.8	1.3	
B	3.0	3.0	3.5	3.0	3.5	3.0	3.5	
Q307								
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
C	5.2	5.2	5.2	5.2	5.2	5.2	5.2	
B	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Q313								
E	5.4	5.4	5.4	5.4	5.4	5.4	5.4	
C	1.6	1.6	5.4	1.6	5.4	1.6	5.4	
B	5.1	5.1	0.0	5.1	0.0	5.1	0.0	

## PRE AMP VOLTAGE CHARTS

MODE PIN No.	PRE AMP							
	STOP	REC	PLAY	REW/ F.FWD	REV/FWD SEARCH	REC PAUSE	PLAY	
ICA01 (IN CASE OF 4HD)								
1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
2	0.0	0.0	0.0	0.0	4.8	0.0	4.8	
3	0.0	0.0	0.0	0.0	2.5	0.0	2.5	
4	0.0	0.0	0.0	0.0	1.8	0.0	1.8	
5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	
6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	
7	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.4	0.4	1.0	0.4	1.0	0.4	1.0	
13	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
14	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
15	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
16	1.5	1.5	0.4	1.5	0.4	1.5	0.4	
17	3.8	3.8	0.0	3.8	3.8	3.8	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	3.5	3.5	2.0	3.5	2.0	3.5	2.0	
20	0.0	0.0	0.9	0.0	0.9	0.0	0.9	
21	4.0	4.0	0.0	4.0	0.0	4.0	0.0	
22	3.2	3.2	2.0	3.2	2.0	3.2	2.0	
23	0.7	0.7	0.7	0.7	0.7	0.7	0.7	
24	4.0	4.0	0.0	4.0	0.0	4.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.7	0.0	0.7	0.0	0.7	

MODE PIN No.	PRE AMP							
	STOP	REC	PLAY	REW/ F.FWD	REV/FWD SEARCH	REC PAUSE	PLAY	
28	3.5	3.5	2.0	3.5	2.0	3.5	2.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.7	0.0	0.7	0.0	0.7	
ICA01 (IN CASE OF 2HD)								
1	5.4	5.4	5.4	5.4	5.4	5.4	5.4	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	2.5	3.5	2.5	3.5	2.5	2.5	2.5	
5	0.0	0.0	3.0	0.0	3.0	0.0	3.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	3.6	3.6	2.3	3.6	2.3	3.6	2.3	
8	3.6	3.6	2.8	3.6	2.8	3.6	2.8	
9	1.6	1.6	0.0	1.6	0.0	1.6	0.0	
10	2.6	2.6	2.6	2.6	2.6	2.6	2.6	
11	4.5	4.5	5.0	4.5	5.0	4.5	5.0	
12	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
13	1.6	1.6	0.0	1.6	0.0	1.6	0.0	
14	4.0	4.0	0.0	4.0	0.0	4.0	0.0	
15	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
16	3.8	3.8	2.0	3.8	2.0	3.8	2.0	
17	0.1	0.1	0.8	0.1	0.8	0.1	0.8	
18	4.2	4.2	0.0	4.2	0.0	4.2	0.0	
19	3.8	3.8	2.0	3.8	2.0	3.8	2.0	
20	0.1	0.1	0.8	0.1	0.8	0.1	0.8	
21	4.2	4.2	0.0	4.2	0.0	4.2	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

## PIF & INPUT SELECT. VOLTAGE CHARTS

MODE	PIF & INPUT SELECT.							
PIN No.	STOP	REC	PLAY	REW/ F.FWD	REV/FWD SEARCH	REC PAUSE	PLAY	
IC151								
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	5.3	5.3	5.3	5.3	5.3	5.3	5.3	
3	5.4	5.4	5.4	5.4	5.4	5.4	5.4	
4	5.3	5.3	5.3	5.3	5.3	5.3	5.3	
5	5.4	5.4	5.4	5.4	5.4	5.4	5.4	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	13.0	13.0	13.0	13.0	13.0	13.0	13.0	
11	5.3	5.3	5.3	5.3	5.3	5.3	5.3	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	5.4	5.4	5.4	5.4	5.4	5.4	5.4	
14	5.4	5.4	5.4	5.4	5.4	5.4	5.4	
15	5.3	5.3	5.3	5.3	5.3	5.3	5.3	
16	12.0	12.0	12.0	12.0	12.0	12.0	12.0	

MODE	PIF & INPUT SELECT.							
PIN No.	STOP	REC	PLAY	REW/ F.FWD	REV/FWD SEARCH	REC PAUSE	PLAY	
Q151								
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
C	5.1	5.1	5.1	5.1	5.1	5.1	5.1	
B	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Q153								
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
C	4.8	4.8	4.8	4.8	4.8	4.8	4.8	
B	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Q154								
E	13.0	13.0	13.1	13.0	13.1	13.0	13.1	
C	12.9	12.9	0.7	12.9	0.7	12.9	0.7	
B	12.3	12.3	13.1	12.2	13.1	12.3	13.1	
Q155								
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
C	0.0	0.0	13.1	0.0	13.1	0.0	13.1	
B	5.1	5.1	0.0	5.1	0.0	5.1	0.0	

# EXPLODED VIEW AND PARTS LIST

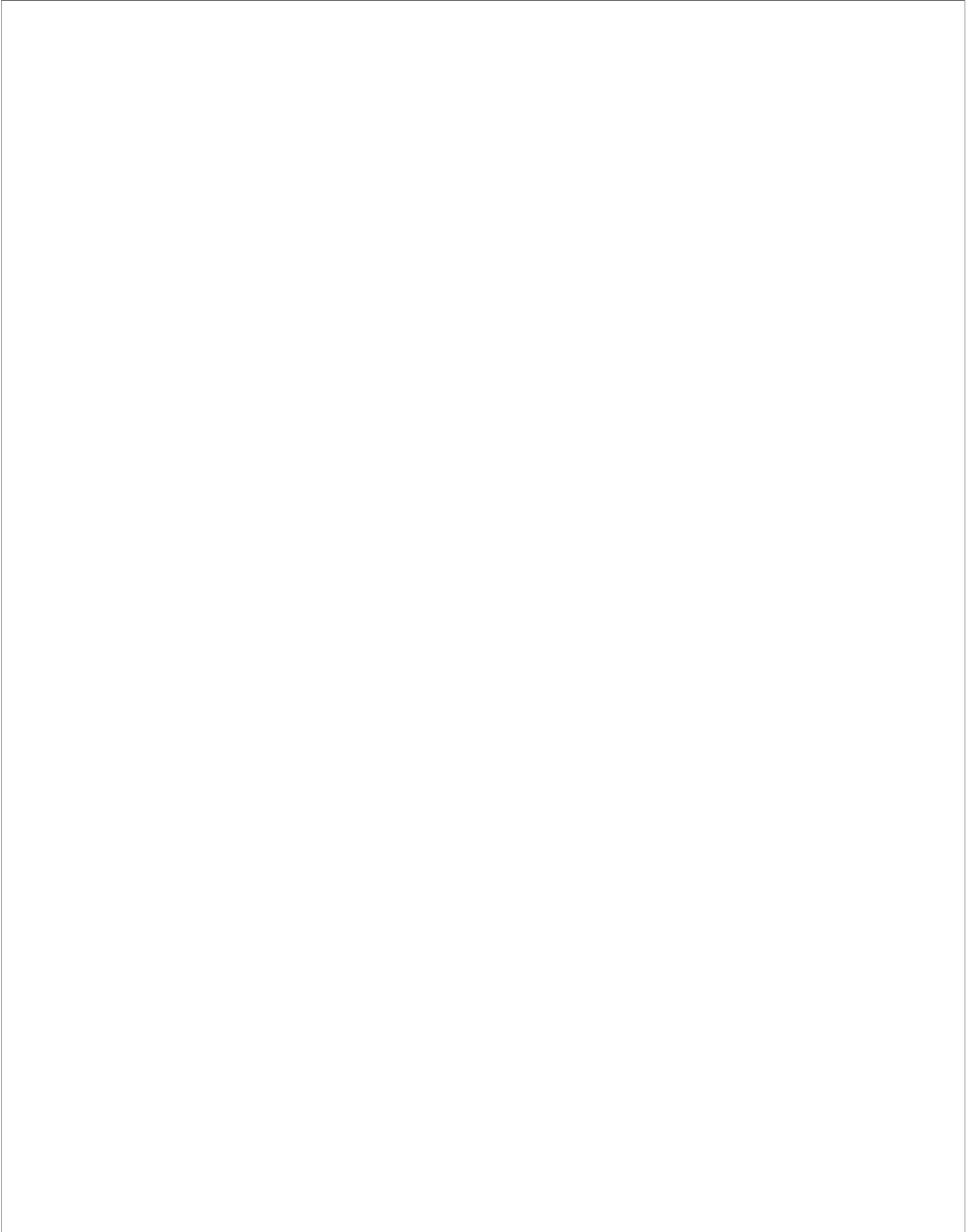
1. EXPLODED VIEW OF DECK ASS'Y (TOP VIEW)	⌘ : Grease    ⌘ : Oil
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## 2. EXPLODED VIEW OF DECK ASS'Y (BOTTOM VIEW)

⌘ : Grease    £ : Oil





### 3. PART LIST OF DECK ASS'Y

LOC.	STOCK NO.	PART NAME	DESCRIPTION
000	97PB0494D-	DECK TOTAL AS	VDN-62000 (2HD NC)
000	97PB0496D-	DECK TOTAL AS	VDN-64000 (4HD NC)
M01	97SC178800	DECK AS	VDN-62000 (2HD NC)
M01	97SD179000	DECK AS	VDN-64000 (4HD NC)
AD001	97SA245801	DRUM TOTAL AS	FM 2HD NC
AD001	97SA247000	DRUM TOTAL AS	FM 4HD NC
B0020	97S1400700	BASE DRUM	ADS-12
B0030	7051300811	SCREW MACHINE	PAN 3X8 SW MFZN
B0040	97SA303300	DRUM AS	FM NTSC 2HD NC
B0040	97SA304100	DRUM AS	FM NTSC 4HD NC
B0050	97SA303100	DRUM MOTOR AS	SDV-0301A
B0060	7001261011	SCREW MACHINE	PAN 2.6X10 MFZN
B0070	7051260811	SCREW MACHINE	PAN 2.6X8 SW MFZN
B0090	97SA305400	DAMPER DYNAMIC AS	SECC T1.2 LUMMIRROR T0.25
AM001	97SA248000	DECK SUB AS	FM-DECK (2HD)
AM001	97SA244800	DECK SUB AS	FM-DECK (4HD)
A0100	97SA300400	MAIN BASE AS	FM-DECK
B0100	97S0400600	CAP T GUIDE POST	FM-DECK
A0200	97S2700100	RACK FL	PBT (DY4410GF)
A0300	97SA304700	RETURN LEVER AS	FM-DECK
B0320	97S3000100	SPRING RETURN	SUS304 WPB
A0400	97SA300500	RELAY PLATE AS	FM-DECK
A0500	97S2700200	GEAR CAM	POM (DELIN500)
A0600	97SA300600	PINCH LEVER TOTAL AS	FM-DECK
B0640	97S3000200	SPRING PINCH	SWPB
A0700	97S3106300	POLY WASHER	D3.6XD6.0XT0.5
A0800	97SA300700	L/C BRKT AS	FM-DECK
B0810	97SA400200	L/C MOTOR AS	FM-DECK
B0860	97SA400400	L/C PCB AS	FM-DECK
C0865	97S885X004	CONN AS	LC-DRUM M/T (Y5X004)
C0866	97S885X005	CONN AS	LC-AC/MT (Y5X005)
B0815	7041300411	SCREW MACHINE	PAN 3X4 MFZN
B0855	5SSFMDKM10	SW MODE	MMS00180ZBO
B0870	97s5500100	BELT L/C	CR 65
B0880	7121400611	SCREW TAPPING	T2S PAN 4X6 MFZN
A0900	7178300811	SCREW TAPTITE	TT2 WAS 3X8 MFZN

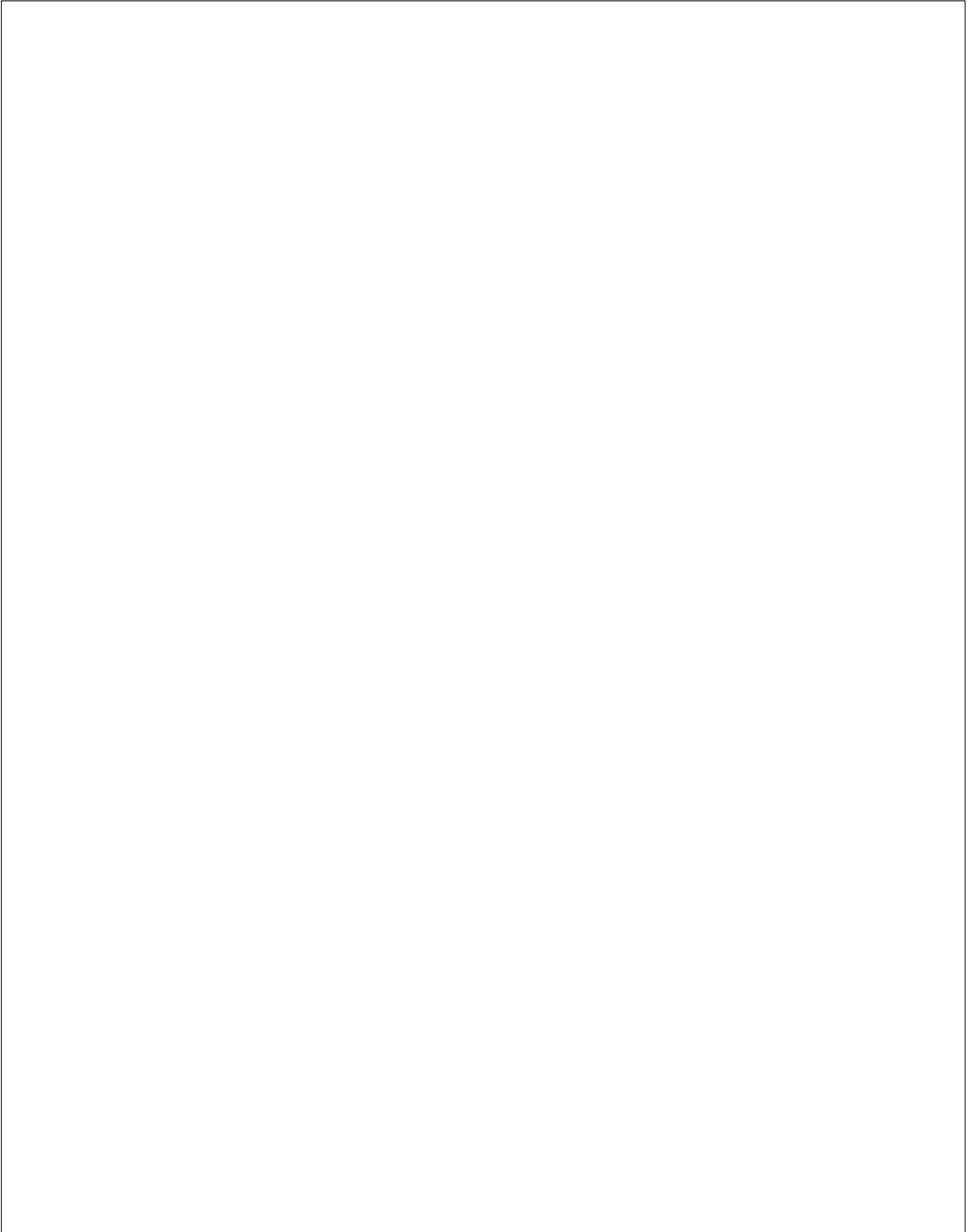
LOC.	STOCK NO.	PART NAME	DESCRIPTION
B0855	5SSFMDKM10	SW MODE	MMS00180ZBO
B0870	97s5500100	BELT L/C	CR 65
B0880	7121400611	SCREW TAPPING	T2S PAN 4X6 MFZN
A0900	7178300811	SCREW TAPTITE	TT2 WAS 3X8 MFZN
A1100	97SA300800	S SLANT POLE AS	FM-DECK
A1200	97SA300900	T SLANT POLE AS	FM-DECK
A1300	97SA301000	L LOADING GEAR AS	FM-DECK
A1400	97SA301100	R LOADING GEAR AS	FM-DECK
A1500	97S0900200	PLATE MAIN	SECC T1.0
A1600	97S2700600	GEAR RELAY	POM (DL8502)
A1700	7178301011	SCREW TAPTITE	TT2 WAS 3X10 MFZN
A1800	97S3002400	SPRING RELAY	USU304 WPB
A1900	97S2700700	GEAR LOAD RELAY	POM (DL8502)
A2000	97S0900300	PLATE LOADING GUIDE	SECC T1.0
A2100	7178300811	SCREW TAPTITE	TT2 WAS 3X8 MFZN
A2200	97S3904000	POLY SLIDER	D3.1XD6XT0.25
A2300	97SA301200	REEL DRIVE TOTAL AS	FM-DECK
A2400	97S3108200	POLY WASHER	D2.6XD6.0XT0.5
A2500	97S2600700	LEVER CLUTCH	POM
A2600	97S5500200	BELT REEL	CR (550G)
A2700	97S2600800	LEVER RECORD SAFETY	POM (F20)
A2800	97S3000900	SPRING REC SAFETY	SUS304 WPB
A2900	97SA301300	CAPSTAN BRAKE AS	FM-DECK (4HD ONLY)
B2930	97S3001000	SPRING CAP BRAKE	SUS304 WPB (4HD ONLY)
A3000	97S8100200	MOTOR CAPSTAN	F2QTB07
A3100	7278260611	SCREW TAPPTITE	TT3 WAS 2.6X6 MFZN
A3200	97S2900200	REEL TABLE	POM
A3300	97S3903600	POLY SLIDER	D3.1XD6XT0.5
A3300	97S3903600	POLY SLIDER	D3.1XD6XT0.5
A3400	97S2601300	LINK LED PRISM	PMMA
A3500	97SA301400	IDLER PLATE AS	FM-DECK
A3600	97S5700100	BRAKE S SUB	POM
A3700	97SA301500	S MAIN BRAKE AS	FM-DECK
A3800	97S3002200	SPRING S BRAKE	SWPB
A3900	97SA301600	T SUB BRAKE AS	FM-DECK
A4000	97SA301700	T MAIN BRAKE AS	FM-DECK

LOC.	STOCK NO.	PART NAME	DESCRIPTION
A4100	97S3002300	SPRING T BRAKE	SUS304 WPB
A4200	97SA301800	TENSION LEVER AS	FM-DECK
B4240	97S3001201	SPRING TENSION	SUS304 WPB
A4300	97SA302400	BAND BRAKE TOTAL AS	FM-DECK
A4400	97SA301900	REVIEW ARM AS	FM-DECK
B4440	97S3001300	SPRING REVIEW ARM	SUS304 WPB
A4500	97S3106300	POLY WASHER	D3.6XD6.0XT0.5
A4600	97S8000600	HEAD FE	MH-131D
A4700	7171261011	SCREW TAPTITE	TT2 PAN 2.6X10 MFZN
A4800	97SA302000	AC HEAD TOTAL AS	FM-DECK
A4900	7061300611	SCREW MACHINE	PAN 3X6 HS MFZN
A5000	97SA301220	EARTH BRKT AS	FM-DECK
A5100	97P88F0908	CABLE FFC AS	1.25 PITCH 9P 80MM
A5200	7274301211	SCREW TAPPTITE	TT3 RND 3X12 MFZN
A5300	7274301011	SCREW TAPPTITE	TT3 RND 3X10 MFZN
A5400	7274300611	SCREW TAPPTITE	TT3 RND 3X6 MFZN

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#### 4. EXPLODED VIEW OF F/L ASS'Y

⌘ : Grease

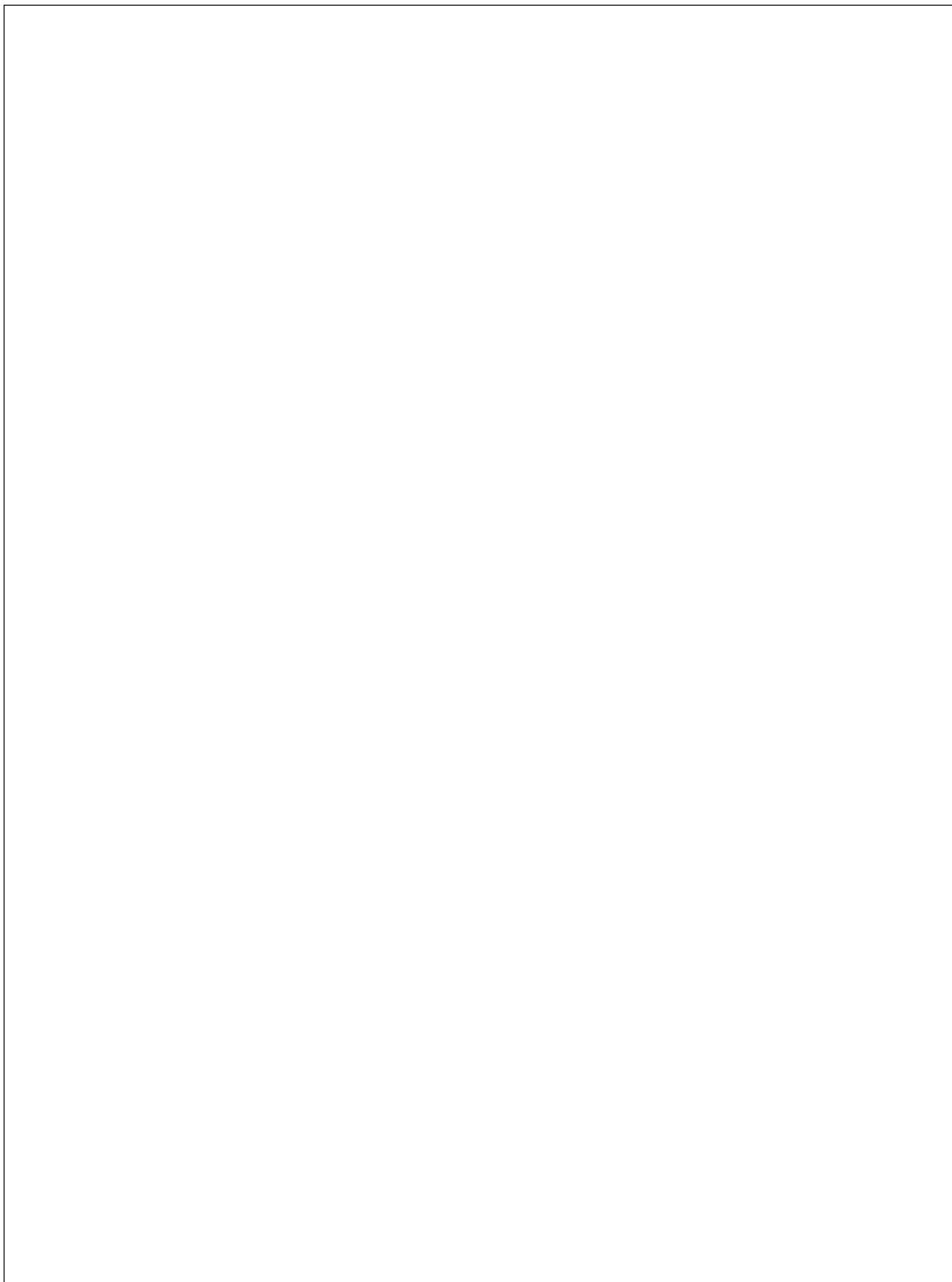


## 5. PARTS LIST OF F/L ASS'Y

LOC.	STOCK NO.	PART NAME	DESCRIPTION
AF001	97SA245000	F/L AS	FM-DECK F/L
AF100	97SA310000	TOP PLATE AS	FM-DECK F/L
BF110	97S0901900	PLATE TOP	SECC T1.0
BF120	97S2602200	LINK PRISM L	PMMA
BF130	7274260611	SCREW TAPTITE	TT3 RND 2.6X6 MFZN
BF140	97S5700600	STOPPER SAFETY	POM (F20)
AF200	97S1800400	OPENER DOOR	POM (DURACON M90)
AF300	97SA309800	FL BRKT R AS	FM-DECK F/L
BF310	97S2400800	BRACKET F/L R	SECC T1.0
BF320	97S2602100	LINK PRISM R	PMMA
BF330	7274260611	SCREW TAPTITE	TT3 RND 2.6X6 MFZN
AF400	97SA309900	LOADING LEVER AS	FM-DECK F/L
AF500	97SA302800	CST HOLDER AS	FM-DECK F/L
BF540	97S2602400	LEVER RELEASE	POM
BF550	97S3001700	SPRING RELEASE	SUS304 WPB
BF560	97S2604900	LEVER SAFETY	SECC T1.0
BF570	97S3001800	SPRING SAFETY	SUS304 WPB
AF600	7278300611	SCREW TAPPTITE	TT3 WAS 3X6 MFZN

# MECHANICAL EXPLODED VIEW

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## MECHANICAL REPLACEMENT PART LIST

NO	PART NO	DESCRIPTION	NO	PART NO	DESCRIPTION
101	97P0455710	COVER, TOP	118	97P2333500	HOLDER, KNOB FUNCTION
102	97P2440200	BRACKET, F/L	119	97P2332700	HOLDER, DIGITRON
103	97P2442100	BRACKET, EARTH TMI ASS'Y	120	97P0800600	LEG
104	97P2441400	BRACKET, DECK	121	97PC152700	PCB, HEAD AMP ASS'Y
§ 105	PVDKASL066	DECK ASS'Y (2H'D)	122	97P0709110	BOARD, ANTENNA
fN	PVDKASL065	DECK ASS'Y (4H'D)	123	97P0456000	CASE, SHIELD SMPS
§ 106	PVMPMSN190	PCB, MAIN ASS'Y (2H'D)	124	97P4213500	CUSHION, BRACKET F/L
fN	PVMPMSN189	PCB, MAIN ASS'Y (4H'D)	125	97P4213100	CUSHION, F/L
107	97P0608410	CHASSIS, MAIN	126	97P4213600	CUSHION, B/D
108	97PC146010	PANEL, FRONT ASS'Y	201	7173401012	SCREW, TAPPTITE BIND 4X10
109	PVLASWN189	PCB, LOGIC(TIMER) ASS'Y	202	7173401211	SCREW, TAPPTITE BIND 4X12
110	97P0455800	COVER, BOTTOM	203	7173401211	SCREW, TAPPTITE BIND 4X12
111	97P0311010	PANEL, FRONT	204	7274300611	SCREW, TAPPTITE ROUND 3X6
112	97P1612700	WINDOW, FRONT	205	7173401211	SCREW, TAPPTITE BIND 4X12
113	97P1815100	DOOR, F/L	206	7173401211	SCREW, TAPPTITE BIND 4X12
114	97P3033600	SPRING, F/L DOOR	207	7174301011	SCREW, TAPPTITE ROUND 3X10
115	97P1336400	KNOB, POWER/EJECT			
116	97P1336600	KNOB, CHANNEL/REC			
117	97P1336700	KNOB, FUNCTION			

# DISASSEMBLY

SET TOTAL ASSEMBLY (DV-F442N/F242N)

No.	Part Code	Part Name	Q'ty	Description	Remark
1	97P0608400	CHASSIS MAIN	1	ABS (V0)	C/BOTTOM FIX
2		PCB LOGIC AS	1		
3	97P0800600	LEG	2	SBR 80 BLK	
4	97P0455810	COVER BOTTOM	1	SECC T0.4	
5	7174301011	SCREW TAPPTITE	3	TT2 RND 3x10 MFZN	
6		PCB MAIN AS	1		
7	97P0709100	BOARD ANT	1	HI-PS	DECK AS FIX SMPS FIX
8		DECK TOTAL AS	1		
9	97P2442100	BRKT TMIAS	1		
10	7173401211	SCREW TAPPTITE	3	TT2 BIN 4x12 MFZN	
11	7173401211	SCREW TAPPTITE	1	TT2 BIN 4X12 MFZN	
12	97P2441400	BRKT DECK	1	SECC T1.6	B/D FIX BOARD ANT FIX
13	7274300611	SCREW TAPPTITE	1	TT3 RND 3x6 MFZN	
14	7173401211	SCREW TAPPTITE	2	TT2 BIN 4x12 MFZN	
15	97P4213600	CUSHION B/D	1	EVA	
16	97P4213100	CUSHION F/L	2	EVA	
17		PANEL FRONT AS	1		
18	97P2440200	BRKT F/L	1	SECC T1.6	BRKT F/L FIX BLK
19	7173401211	SCREW TAPPTITE	2	TT2 BIN 4x12 MFZN	
20	97P4213500	CUSHION BRKT	1	EVA	
21	97P0455710	COVER TOP	1	SECC T0.6+PVC T0.15	
22	7173401012	SCREW TAPPTITE	5	TT2 BIN 4x10 MFZN	COVER TOP FIX



SET TOTAL ASSEMBLY (DV-F542N/F342N)

No.	Part Code	Part Name	Q'ty	Description	Remark
1	97P0608400	CHASSIS MAIN	1	ABS (HB)	DECK AS FIX BOARD ANT FIX COVER TOP FIX C/BOTTOM FIX BRKT F/L FIX
2	97PC146300	PANEL FRONT AS	1		
3		PCB LOGIC AS	1		
4		PCB MAINAS	1		
5	97PB0348D-	DECK TOTAL AS	1		
6	97P0455700	COVER TOP	1	SECC T0.6+PVC T0.15	
7	97P0455800	COVER BOTTOM	1	SECC T0.4	
8	97P2440200	BRKT F/L	1	SECC T1.6	
9	97P2440300	BRKT EARTH TMI	1	SECC T0.8	
10		PCB HEAD AMP AS	1		
11	97P0709100	BOARD ANT	1	HI-PS (HB)	
12	7173401211	SCREW TAPPTITE	3	TT2 BIN 4x12 MFZN	
13	7173401211	SCREW TAPPTITE	2	TT2 BIN 4x12 MFZN	
14	7173401012	SCREW TAPTITE	5	TT2 BIN 4x10 BK MFZN	
15	7174301011	SCREW TAPPTITE	3	TT2 RND 3x10 MFZN	
16	7173401211	SCREW TAPPTITE	2	TT2 BIN 4x12 MFZN	
17	97P0800600	LEG	2	SBR 80 BLK	
18	97P4213100	CUSHION F/L	2	EVA	
19	97P4213500	CUSHION BRKT	1	EVA BLK	
20	97P4213600	CUSHION B/D	1	EVA BLK	
21	97P2441400	BRKT DECK	1	SECC	

SET TOTAL ASSEMBLY (DV-F482N/F282N/F462N/F262N)

No.	Part Code	Part Name	Q'ty	Description	Remark
1	97P0608400		1	ABS (HB)	
2		PANEL FRONT AS	1		
3		PCB LOGIC AS	1		
4	97PC144100	PCB MAINAS	1		
5	97PB0348D-	DECK TOTAL AS	1		
6	97P0455700	COVER TOP	1	SECC T0.6+PVC T0.15	
7	97P0455800	COVER BOTTOM	1	SECC T0.4	
8	97P2440200	BRKT F/L	1	SECC T1.6	
9	97P2440300	BRKT EARTH TMI	1	SECC T0.8	
10	97PC144900	PCB HEAD AMP AS	1		
11	97P0709100	BOARD ANT	1	HI-PS (HB)	
12	7173401211	SCREW TAPPTITE	3	TT2 BIN 4x12 MFZN	DECK AS FIX
13	7173401211	SCREW TAPPTITE	2	TT2 BIN 4x12 MFZN	BOARD ANT FIX
14	7173401012	SCREW TAPTITE	5	TT2 BIN 4x10 BK MFZN	COVER TOP FIX
15	7174301011	SCREW TAPPTITE	3	TT2 RND 3x10 MFZN	C/BOTTOM FIX
16	7173401211	SCREW TAPPTITE	2	TT2 BIN 4x12 MFZN	BRKT F/L FIX
17	97P0800600	LEG	2	SBR 80 BLK	
18	97P4213100	CUSHION F/L	2	EVA	
19	97P4213500	CUSHION BRKT	1	EVA BLK	
20	97P4213600	CUSHION B/D	1	EVA BLK	
21	97P2441400	BRKT DECK	1	SECC	

FRONT PANEL ASSEMBLY (DV-F542N/F342N)

No.	Part Code	Part Name	Q'ty	Description	Remark
1	97P0311400	PANEL FRONT	1	ABS	
2	97P1613200	WINDOW FRONT	1	PMMA	
3	97P4706500	FILTER DIGITRON	1	PVC 0.5	
4	97P3033600	SPRING F/L DOOR	1	SWPB	
5	97P1815300	DOOR F/L	1	ABS	
6	97P1665400	KNOB FUNCTION	1	ABS	
7	97P2333000	HOLDER K/F	1	ABS	
8		SHUTTLE STATION AS	1		
9	7174301011	SCREW TAPPTITE	3	TT2 RND 3x10 MFZN	
10	97P0961000	PLATE EARTH-R	1	PRESS T0.15	
11	97P0961100	PLATE EARTH-L	1	PRESS T0.15	

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## SHUTTLE STATION ASSEMBLY (DV-F542N/F342N ONLY)

No.	Part Code	Part Name	Q'ty	Description	Remark
1	97P1335600	KNOB S/FUNCTION	1	ABS	
2	97P3036300	SPRING KNOB	1	SUS 304 WPB	
3	97P2507900	GUIDE K/STATION	1	ABS	
4	97PB392900	PLATE DOME AS	1		
5	97P2333100	HOLDER K/STATION	1	ABS	
6	97P1335500	KNOB SHUTTLE	1	ABS	
7		SWITCH SHUTTLE	1		
8		SHUTTLE STATION AS	1		
9	97P0956800	EARTH PLATE	1		

# ELECTRICAL REPLACEMENT PARTS LIST

§ DV-F442/F242N/X ONLY ; ¢ DV-F342N/F542N ONLY f ¤4 HEAD ONLY § 2 HEAD ONLY

## RESISTORS

NO	PART NO	PART NAME	DESCRIPTION	NO	PART NO	PART NAME	DESCRIPTION
R151	HRFT104JCA	R CHIP	1/10 100K OHM J 2012	R217	HRFT103JCA	R CHIP	1/10 10K OHM J 2012
R152	HRFT104JCA	R CHIP	1/10 100K OHM J 2012	R218	HRFT103JCA	R CHIP	1/10 10K OHM J 2012
R153	HRFT104JCA	R CHIP	1/10 100K OHM J 2012	R219	HRFT153JCA	R CHIP	1/10 15K OHM J 2012
R154	HRFT104JCA	R CHIP	1/10 100K OHM J 2012	R220	HRFT102JCA	R CHIP	1/10 1K OHM J 2012
R155	HRFT104JCA	R CHIP	1/10 100K OHM J 2012	R221	HRFT331JCA	R CHIP	1/10 330 OHM J 2012
R156	RD-AZ243J-	R CARBON FILM	1/6 24K OHM J	R222	RD-AZ243J-	R CARBON FILM	1/6 24K OHM J
R157	RD-AZ243J-	R CARBON FILM	1/6 24K OHM J	R223	HRFT203JCA	R CHIP	1/10 20K OHM J 2012
R158	HRFT104JCA	R CHIP	1/10 100K OHM J 2012	R224	HRFT202JCA	R CHIP	1/10 2K OHM J 2012
R159	HRFT104JCA	R CHIP	1/10 100K OHM J 2012	R225	HRFT332JCA	R CHIP	1/10 3.3K OHM J 2012
R160	HRFT104JCA	R CHIP	1/10 100K OHM J 2012	R226	RD-AZ183J-	R CARBON FILM	1/6 18K OHM J
R161	HRFT104JCA	R CHIP	1/10 100K OHM J 2012	R227	HRFT333JCA	R CHIP	1/10 33K OHM J 2012
R162	HRFT103JCA	R CHIP	1/10 10K OHM J 2012	R228	HRFT102JCA	R CHIP	1/10 1K OHM J 2012
R163	HRFT103JCA	R CHIP	1/10 10K OHM J 2012	R229	RD-AZ519J-	R CARBON FILM	1/6 5.1 OHM J
R164	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	R230	HRFT472JCA	R CHIP	1/10 4.7K OHM J 2012
R165	RD-AZ122J-	R CARBON FILM	1/6 1.2K OHM J	R231	HRFT562JCA	R CHIP	1/10 5.6K OHM J 2012
R166	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	R234	RD-AZ511J-	R CARBON FILM	1/6 510 OHM J
R167	RD-AZ393J-	R CARBON FILM	1/6 39K OHM J	R292	RV5426204M	R SEMI FIXED	H200K-5X3-6Y-PC-MS
R168	HRFT243JCA	R CHIP	1/10 24K OHM J 2012	R301	HRFT162JCA	R CHIP	1/10 1.6K OHM J 2012
R169	HRFT153JCA	R CHIP	1/10 15K OHM J 2012	R302	HRFT472JCA	R CHIP	1/10 4.7K OHM J 2012
R170	HRFT750JCA	R CHIP	1/10 75 OHM J 2012	R303	RD-AZ222J-	R CARBON FILM	1/6 2.2K OHM J
R171	HRFT750JCA	R CHIP	1/10 75 OHM J 2012	R304	HRFT621JCA	R CHIP	1/10 620 OHM J 2012
R172	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	R305	HRFT272JCA	R CHIP	1/10 2.7K OHM J 2012
R173	RD-AZ202J-	R CARBON FILM	1/6 2K OHM J	R307	HRFT822JCA	R CHIP	1/10 8.2K OHM J 2012
R174	RD-AZ392J-	R CARBON FILM	1/6 3.9K OHM J	R308	HRFT182JCA	R CHIP	1/10 1.8K OHM J 2012
R178	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	R309	HRFT222JCA	R CHIP	1/10 2.2K OHM J 2012
R202	HRFT121JCA	R CHIP	1/10 120 OHM J 2012	R310	HRFT182JCA	R CHIP	1/10 1.8K OHM J 2012
R203	HRFT822JCA	R CHIP	1/10 8.2K OHM J 2012	R311	HRFT431JCA	R CHIP	1/10 430 OHM J 2012
R204	HRFT334JCA	R CHIP	1/10 330K OHM J 2012	R312	HRFT431JCA	R CHIP	1/10 430 OHM J 2012
R205	HRFT912JCA	R CHIP	1/10 9.1K OHM J 2012	R315	HRFT152JCA	R CHIP	1/10 1.5K OHM J 2012
R206	HRFT272JCA	R CHIP	1/10 2.7K OHM J 2012	R316	HRFT102JCA	R CHIP	1/10 1K OHM J 2012
R207	HRFT472JCA	R CHIP	1/10 4.7K OHM J 2012	R318	HRFT102JCA	R CHIP	1/10 1K OHM J 2012
R208	HRFT105JCA	R CHIP	1/10 1M OHM J 2012	R319	HRFT562JCA	R CHIP	1/10 5.6K OHM J 2012
R209	HRFT473JCA	R CHIP	1/10 47K OHM J 2012	R320	HRFT392JCA	R CHIP	1/10 3.9K OHM J 2012
R210	HRFT133J	CA R CHIP	1/10 13K OHM J 2012	R322	HRFT823JCA	R CHIP	1/10 82K OHM J 2012
R211	RD-AZ104J-	R CARBON FILM	1/6 100K OHM J	R323	HRFT102JCA	R CHIP	1/10 1K OHM J 2012
R214	RD-AZ471J-	R CARBON FILM	1/6 470 OHM J	R326	HRFT102JCA	R CHIP	1/10 1K OHM J 2012
R215	RD-AZ821J-	R CARBON FILM	1/6 820 OHM J	R327	HRFT391JCA	R CHIP	1/10 390 OHM J 2012
R216	HRFT472JCA	R CHIP	1/10 4.7K OHM J 2012	R328	HRFT152JCA	R CHIP	1/10 1.5K OHM J 2012

NO	PART NO	PART NAME	DESCRIPTION
R329	HRFT471JCA	R CHIP	1/10 470 OHM J 2012
R330	HRFT471JCA	R CHIP	1/10 470 OHM J 2012
R331	HRFT471JCA	R CHIP	1/10 470 OHM J 2012
R332	RD-AZ104J-	R CARBON FILM	1/6 100K OHM J
R333	RD-AZ753J-	R CARBON FILM	1/6 75K OHM J
fN R335	RD-AZ823J-	R CARBON FILM	1/6 82K OHM J
R494	RV5426202M	R SEMI FIXED	H2K-5X3-6Y-PC-MS
R501	HRFT302JCA	R CHIP	1/10 3K OHM J 2012
R502	RD-AZ221J-	R CARBON FILM	1/6 220 OHM J
R504	HRFT103JCA	R CHIP	1/10 10K OHM J 2012
R505	HRFT273JCA	R CHIP	1/10 27K OHM J 2012
R506	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R507	HRFT472JCA	R CHIP	1/10 4.7K OHM J 2012
R508	RD-AZ182G-	R CARBON FILM	1/6 1.8K OHM G
R509	RD-AZ182G-	R CARBON FILM	1/6 1.8K OHM G
R510	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R511	HRFT332JCA	R CHIP	1/10 3.3K OHM J 2012
R512	HRFT153JCA	R CHIP	1/10 15K OHM J 2012
R513	HRFT103JCA	R CHIP	1/10 10K OHM J 2012
R514	RD-AZ303J-	R CARBON FILM	1/6 30K OHM J
R515	HRFT103JCA	R CHIP	1/10 10K OHM J 2012
R516	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
R517	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R518	RD-AZ474J-	R CARBON FILM	1/6 470K OHM J
R519	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R520	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R521	RD-AZ273J-	R CARBON FILM	1/6 27K OHM J
R522	HRFT103JCA	R CHIP	1/10 10K OHM J 2012
R523	HRFT473JCA	R CHIP	1/10 47K OHM J 2012
R524	HRFT473JCA	R CHIP	1/10 47K OHM J 2012
R525	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R595	RV5426104M	R SEMI FIXED	H100K-5X3-6Y-PC-MS
R603	HRFT473JCA	R CHIP	1/10 47K OHM J 2012
R604	HRFT102JCA	R CHIP	1/10 1K OHM J 2012
i R605	HRFT102JCA	R CHIP	1/10 1K OHM J 2012
R608	HRFT103JCA	R CHIP	1/10 10K OHM J 2012
R611	HRFT103JCA	R CHIP	1/10 10K OHM J 2012
R612	HRFT103JCA	R CHIP	1/10 10K OHM J 2012
R613	HRFT103JCA	R CHIP	1/10 10K OHM J 2012
R614	HRFT103JCA	R CHIP	1/10 10K OHM J 2012

NO	PART NO	PART NAME	DESCRIPTION
R619	HRFT102JCA	R CHIP	1/10 1K OHM J 2012
R620	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R621	HRFT274JCA	R CHIP	1/10 270K OHM J 2012
R622	HRFT102JCA	R CHIP	1/10 1K OHM J 2012
R623	HRFT104JCA	R CHIP	1/10 100K OHM J 2012
R624	RD-4Z106J-	R CARBON FILM	1/4 10M OHM J
R625	HRFT105JCA	R CHIP	1/10 1M OHM J 2012
R626	HRFT511JCA	R CHIP	1/10 510 OHM J 2012
R627	RD-AZ151J-	R CARBON FILM	1/6 150 OHM J
i R628	RD-AZ510J-	R CARBON FILM	1/6 51K OHM J
R629	HRFT102JCA	R CHIP	1/10 1K OHM J 2012
R630	HRFT102JCA	R CHIP	1/10 1K OHM J 2012
R631	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R632	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R633	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R634	RD-AZ303J-	R CARBON FILM	1/6 30K OHM J
R635	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R636	RD-AZ201J-	R CARBON FILM	1/6 200 OHM J
R637	RD-AZ273J-	R CARBON FILM	1/6 27K OHM J
R638	HRFT201JCA	R CHIP	1/10 200 OHM J 2012
R639	HRFT273JCA	R CHIP	1/10 27K OHM J 2012
fN R640	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R641	HRFT332JCA	R CHIP	1/10 3.3K OHM J 2012
R642	RS02Y399J-	R M-OXIDE FILM	2W 3.9 OHM J
R643	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
R644	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R645	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
R646	HRFT274JCA	R CHIP	1/10 270K OHM J 2012
R647	HRFT103JCA	R CHIP	1/10 10K OHM J 2012
R648	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
R649	HRFT472JCA	R CHIP	1/10 4.7K OHM J 2012
R652	HRFT472JCA	R CHIP	1/10 4.7K OHM J 2012
R653	HRFT103JCA	R CHIP	1/10 10K OHM J 2012
R655	RD-AZ151J-	R CARBON FILM	1/6 150 OHM J
R656	HRFT101JCA	R CHIP	1/10 100 OHM J 2012
R657	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
R670	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R671	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R701	RD-AZ105J-	R CARBON FILM	1/6 1M OHM J
R702	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J

NO	PART NO	PART NAME	DESCRIPTION
R703	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
R704	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
R705	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
R706	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
R707	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
R708	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
R709	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
R710	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R711	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R712	RD-AZ104J-	R CARBON FILM	1/6 100K OHM J
R713	RD-AZ104J-	R CARBON FILM	1/6 100K OHM J
R714	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R801	RD-2Z335J-	R CARBON FILM	1/2 3.3M OHM J
R820	RD-AZ272J-	R CARBON FILM	1/6 2.7K OHM J
R824	RD-4Z123J-	R CARBON FILM	1/4 12K OHM J
R826	RD-4Z622J-	R CARBON FILM	1/4 6.2K OHM J
R827	RD-4Z123J-	R CARBON FILM	1/4 12K OHM J
R829	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R831	RD-AZ511J-	R CARBON FILM	1/6 510 OHM J

NO	PART NO	PART NAME	DESCRIPTION
R832	RD-AZ300J-	R CARBON FILM	1/6 30 OHM J
RA01	HRFT223JCA	R CHIP	1/10 22K OHM J 2012
fNRA02	HRFT223JCA	R CHIP	1/10 22K OHM J 2012
fNRA03	HRFT102JCA	R CHIP	1/10 1K OHM J 2012
i RA03	HRFT911JCA	R CHIP	1/10 910 OHM J 2012
fNRA04	HRFT000-CA	R CHIP	1/10 0 OHM 2012
i RA04	HRFT820JCA	R CHIP	1/10.82 OHM J
fNRA05	HRFT152JCA	R CHIP	1/10 1.5K OHM J 2012
i RA05	HRFT112JCA	R CHIP	1/10.1.1K OHM J
fNRA09	HRFT162JCA	R CHIP	1/10 1.6K OHM J 2012
i RA09	HRFT182JCA	R CHIP	1/10 1.8K OHM J 2012
i RA11	HRFT303JCA	R CHIP	1/10 30K OHM J 2012
fNRA30	HRFT273JCA	R CHIP	1/10 27K OHM J 2012
i RA30	HRFT473JCA	R CHIP	1/10 47K OHM J 2012
RS01	RD-4Z391J-	R CARBON FILM	1/4 390 OHM J
RS02	HRFT753JCA	R CHIP	1/10 75K OHM J 2012
RS03	HRFT303JCA	R CHIP	1/10 30K OHM J 2012
RS04	HRFT302JCA	R CHIP	1/10 3K OHM J 2012
RS09	HRFT101JCA	R CHIP	1/10 100 OHM J 2012

## CAPACITORS

NO	PART NO	PART NAME	DESCRIPTION
C151	CEXF1H478A	C ELECTRO	50V RSM 0.47MF (4X7)
C153	CMXM2A103J	C MYLAR	100V 0.01MF J (TP)
C154	CEXE1H100A	C ELECTRO	50V RS 10MF (5X11) TP
C155	CEXE1H100A	C ELECTRO	50V RS 10MF (5X11) TP
C156	CEXE1H100A	C ELECTRO	50V RS 10MF (5X11) TP
C157	CEXE1H109A	C ELECTRO	50V RS 1MF (5X11) TP
C158	CEXE1H109A	C ELECTRO	50V RS 1MF (5X11) TP
C159	CEXE1H109A	C ELECTRO	50V RS 1MF (5X11) TP
C160	CEXE0J471A	C ELECTRO	6.3V RS 470MF 10X12.5
C161	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C162	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C163	CEXF1C470A	C ELECTRO	16V RSM 47MF (6.3X7) TP
C201	CMXM2A473J	C MYLAR	100V 0.047MF J TP
C202	CCXB2H221K	C CERA	500V B 220PF K (TAPPING)
C203	CEXE1E470A	C ELECTRO	25V RS 47MF 6.3X11
C204	CMXM2A472J	C MYLAR	100V 4700PF J TP
C205	CMXM2A682J	C MYLAR	100V 6800PF J TP

NO	PART NO	PART NAME	DESCRIPTION
C206	CEXE1E101A	C ELECTRO	25V RS 100MF 8X11.5
C207	CEXE1H100A	C ELECTRO	50V RS 10MF (5X11) TP
C208	CMXM2A103J	C MYLAR	100V 0.01MF J (TP)
C209	CEXE1H108A	C ELECTRO	50V RS 0.1MF (5X11) TP
C212	CEXE1H108A	C ELECTRO	50V RS 0.1MF (5X11) TP
C213	CEXE1E220A	C ELECTRO	25V RS 22MF 5X11 5T
C214	CMXM2A103J	C MYLAR	100V 0.01MF J (TP)
C215	CEXE1E220A	C ELECTRO	25V RS 22MF 5X11 5T
C216	CEXE1H339A	C ELECTRO	50V RS 3.3MF (5X11) TP
C217	HCLK102KCA	C CHIP CERA	SL 50V 1000PF K 2012
C219	CEXE1E220A	C ELECTRO	25V RS 22MF 5X11 5T
C220	CCXF1H103Z	C CERA	50V F 0.01MF Z (TAPPING)
C221	CEXE1H479A	C ELECTRO	50V RS 4.7MF (5X11) TP
C222	CMXM2A223J	C MYLAR	100V 0.022MF J TP
C223	CMXM2A332J	C MYLAR	100V 3300PF J TP
C224	CMXM2A822J	C MYLAR	100V 8200PF J TP
C300	CEXF1A100A	C ELECTRO	10V RSM 10MF 4X7

NO	PART NO	PART NAME	DESCRIPTION
C302	HCLK181JCA	C CHIP CERA	50V SL 180PF J 2012
C302	HCLK201JCA	C CHIP CERA	50V SL 200PF J 2012
C303	HCLK330JCA	C CHIP CERA	50V SL 33PF J 2012
C304	CEXE1H109A	C ELECTRO	50V RS 1MF (5X11) TP
C305	HCLK391JCA	C CHIP CERA	50V SL 390PF J 2012
C306	HCLK309CCA	C CHIP CERA	50V SL 3PF J 2012
C307	CEXE1H100A	C ELECTRO	50V RS 10MF (5X11) TP
C308	CEXE1H100A	C ELECTRO	50V RS 10MF (5X11) TP
C310	CEXE1H109A	C ELECTRO	50V RS 1MF (5X11) TP
C311	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
C312	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
C313	CCXF1H103Z	C CERA	50V F 0.01MF Z (TAPPING)
C314	CEXE1H109A	C ELECTRO	50V RS 1MF (5X11) TP
C315	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C316	CEXE1H109A	C ELECTRO	50V RS 1MF (5X11) TP
C317	CEXE1H109A	C ELECTRO	50V RS 1MF (5X11) TP
C318	CEXE1H109A	C ELECTRO	50V RS 1MF (5X11) TP
C319	HCFK223ZCA	C CHIP CERA	50V Y5V 0.022MF Z 2012
C320	HCFK473ZCA	C CHIP CERA	50V Y5V 0.047MF Z 2012
C321	CEXE1A470A	C ELECTRO	10V RS 47MF 5X11
C322	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
C323	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C324	CEXE1A101A	C ELECTRO	10V RS 100MF 6.3X11
C325	CEXE1H100A	C ELECTRO	50V RS 10MF (5X11) TP
C326	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
C327	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
C328	HCLK270JCA	C CHIP CERA	50V SL 27PF J 2012
C329	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C330	HCLK300JCA	C CHIP CERA	50V SL 30PF J 2012
C333	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP
C334	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C336	HCBK104KCA	C CHIP CERA	50V X7R 0.1MF K 2012
C337	CEXF1C100A	C ELECTRO	16V RSM 10MF (4X7) TP
C338	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C339	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
C340	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
C342	HCLK330JCA	C CHIP CERA	50V SL 33PF J 2012
C343	HCLK330JCA	C CHIP CERA	50V SL 33PF J 2012
C345	HCLK121JCA	C CHIP CERA	50V SL 120PF J 2012
C346	HCLK330JCA	C CHIP CERA	50V SL 33PF J 2012

NO	PART NO	PART NAME	DESCRIPTION
C360	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C362	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
C501	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C503	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C504	CEXF1H100A	C ELECTRO	50V RSM 10MF (6.3X7) TP
C505	CEXF1H100A	C ELECTRO	50V RSM 10MF (6.3X7) TP
C506	CEXF1A470A	C ELECTRO	10V RSM 47MF 6.3*7
C507	CEXF1A100A	C ELECTRO	10V RSM 10MF 4X7
C508	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP
C509	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP
C510	HCBK102KCA	C CHIP CERA	50V X7R 1000PF K 2012
C511	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C512	CEXF1A470A	C ELECTRO	10V RSM 47MF 6.3*7
C513	CMXM2A223J	C MYLAR	100V 0.022MF J TP
C514	HCBK223KCA	C CHIP CERA	50V X7R 0.022MF K 2012
C515	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
C516	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
C517	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
C522	CEXE1E470A	C ELECTRO	25V RS 47MF 6.3*11
C602	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C603	CEXF1A470A	C ELECTRO	10V RSM 47MF 6.3*7
C604	CEXF1A470A	C ELECTRO	10V RSM 47MF 6.3*7
C605	CEXF1A470A	C ELECTRO	10V RSM 47MF 6.3*7
C606	HCQK180JCA	C CHIP CERA	50V CH 18PF J 2012
C607	HCQK180JCA	C CHIP CERA	50V CH 18PF J 2012
C608	HCQK220JCA	C CHIP CERA	50V CH 22PF J 2012
C609	HCQK240JCA	C CHIP CERA	50V CH 24PF J 2012
C612	CEXF1A470A	C ELECTRO	10V RSM 47MF 6.3*7
C613	CEXF1A470A	C ELECTRO	10V RSM 47MF 6.3*7
C614	CXSL1H101J	C CERA	50V SL 100PF J
C615	CXSL1H101J	C CERA	50V SL 100PF J
C616	HCLK101JCA	C CHIP CERA	50V SL 100PF J 2012
C617	HCLK101JCA	C CHIP CERA	50V SL 100PF J 2012
C619	CEXE1E470A	C ELECTRO	25V RS 47MF 6.3*11
C620	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
C621	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
C622	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
C623	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
C626	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
C627	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012



NO	PART NO	PART NAME	DESCRIPTION
C628	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C630	HCLK201JCA	C CHIP CERA	50V SL 200PF J 2012
C631	HCLK201JCA	C CHIP CERA	50V SL 200PF J 2012
C632	HCLK201JCA	C CHIP CERA	50V SL 200PF J 2012
C652	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
C653	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
C654	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
C655	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
C656	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
C657	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
C658	HCLK201JCA	C CHIP CERA	50V SL 200PF J 2012
C666	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
C668	CEXE0J221S	C ELECTRO	6.3V RSA 220MF (6.3X7)
C669	CEXE0J221S	C ELECTRO	6.3V RSA 220MF (6.3X7)
C680	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C701	CCXF1H103Z	C CERA	50V F 0.01MF Z (TAPP'ING)
C702	CEXF1A470A	C ELECTRO	10V RSM 47MF 6.3*7
1# C703	CCXF1H103Z	C CERA	50V F 0.01MF Z (TAPPING)
1# C704	CCXF1H103Z	C CERA	50V F 0.01MF Z (TAPPING)
1# C705	CCXF1H103Z	C CERA	50V F 0.01MF Z (TAPPING)
C706	CCXF1H103Z	C CERA	50V F 0.01MF Z (TAPPING)
C801	CH1BEF103Z	C CERA AC	U/C/V 2.5KV 0.01MF
C802	CH1BEB101K	C CERA AC	U/V/C 2.5K SCB2G101K10BS
C803	CH1BEB101K	C CERA AC	U/V/C 2.5K SCB2G101K10BS
C804	CH1BEE332M	C CERA AC	U/C/V 2.5KV SCE2G332M16BS
C805	CH1BEE332M	C CERA AC	U/C/V 2.5KV SCE2G332M16BS
C806	CEXF2E101V	C ELECTRO	RSS 250V 100MF 18*35.5
C816	CEXF1E101F	C ELECTRO	25V RX 100MF 8X11.5
C819	CEXF1A101F	C ELECTRO	10V RX 100MF 5X11
C822	CCXF1H103Z	C CERA	50V F 0.01MF Z (TAPP'ING)
C827	CEXE1H470A	C ELECTRO	50V RS 47MF 8X11.5
C828	CEXE1E470A	C ELECTRO	25V RS 47MF 6.3X11
C830	CEXE1E470A	C ELECTRO	25V RS 47MF 6.3X11
C831	CEXE1E470A	C ELECTRO	25V RS 47MF 6.3X11

NO	PART NO	PART NAME	DESCRIPTION
C832	CEXE1E470A	C ELECTRO	25V RS 47MF 6.3X11
C833	CEXE1A470A	C ELECTRO	10V RS 47MF 5X11
fNCA01	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
fNCA02	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
fNCA03	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
CA04	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
CA05	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
CA06	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
CA07	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
fNCA08	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
CA09	HCBK104KCA	C CHIP CERA	50V X7R 0.1MF K 2012
fNCA10	HCFK103ZCA	C CHIP CERA.	50V Y5V 0.01MF Z 2012
CA12	CXSL1H560J	C CERA	50V SL 56PF J (TAPPING)
CA13	HCBK104KCA	C CHIP CERA	50V X7R 0.1MF K 2012
CA14	HCLK270JCA	C CHIP CERA	50V SL 27PF J 2012
CA15	CXSL1H100J	C CERA	50V SL 10PF J (TAPPING)
fNCA16	HCLK200JCA	C CHIP CERA	50V SL 20PF J 2012
CA18	HCLK821JCA	C CHIP CERA	50V SL 820PF J 2012
CA19	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP
CA20	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012
CA21	HCBK104KCA	C CHIP CERA	50V X7R 0.1MF K 2012
CA22	CEXE0J221S	C ELECTRO	6.3V RSA 220MF (6.3X7)
fNCA23	CXSL1H101J	C CERA	50V SL 100PF J
i CA23	CXSL1H121J	C CERA	50V SL 120PF J
CS01	HCLK300JCA	C CHIP CERA	50V SL 30PF J 2012
CS02	HCLK200JCA	C CHIP CERA	50V SL 20PF J 2012
CS03	CEXE1H228A	C ELECTRO	50V RS 0.22MF (5X11) TP
CS04	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
CS05	CEXE1A470A	C ELECTRO	10V RS 47MF 5X11
CS06	HCQK180JCA	C CHIP CERA	50V CH 18PF J 2012
CS07	HCLK180JCA	C CHIP CERA	SL 50V 18PF J 2012
CS08	HCQK809DCA	C CHIP CERA	50V CH 8PF D 2012
CS21	CEXF1C221V	C ELECTRO	16V RSS 220MF (8X11.5) TP
CS31	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012

## SEMICONDUCTORS

NO	PART NO	PART NAME	DESCRIPTION
D201	DZN4148---	DIODE	1N4148 AUTO 52MM
D202	DZN4148---	DIODE	1N4148 AUTO 52MM

NO	PART NO	PART NAME	DESCRIPTION
D203	DZN4148---	DIODE	1N4148 AUTO 52MM
D301	DZN4148---	DIODE	1N4148 AUTO 52MM

NO	PART NO	PART NAME	DESCRIPTION
D304	DZN4148---	DIODE	1N4148 AUTO 52MM
fND305	DZN4148---	DIODE	1N4148 AUTO 52MM
D307	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
D360	DZN4148---	DIODE	1N4148 AUTO 52MM
i D601	DZN4148---	DIODE	1N4148 AUTO 52MM
D602	DZN4003---	DIODE	IN4003
D603	DZN4003---	DIODE	IN4003
D606	DS1R481T--	LED IR	SIR-48IT
D606A	97P2334200	HOLDER LED	POM
		SENSOR	
i D611	DZN4148---	DIODE	1N4148 AUTO 52MM
i D612	DZN4148---	DIODE	1N4148 AUTO 52MM
D612	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
D702	DZN4148---	DIODE	1N4148 AUTO 52MM
D705	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
D706	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
D707	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
D708	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
D709	DZN4148---	DIODE	1N4148 AUTO 52MM
D710	DZN4148---	DIODE	1N4148 AUTO 52MM
D711	DZN4148---	DIODE	1N4148 AUTO 52MM
D712	DZN4148---	DIODE	1N4148 AUTO 52MM
D713	DZN4148---	DIODE	1N4148 AUTO 52MM
D714	DZN4148---	DIODE	1N4148 AUTO 52MM
D715	DZN4148---	DIODE	1N4148 AUTO 52MM
D801	DS1WBA60--	DIODE BRIDGE	S1WBA60
DZ605	DZZ3R9B---	DIODE ZENER	DZ 3R9B (3R9) (AUTO)
DZ607	DZZ7R5BM--	DIODE ZENER	UZ-7.5BM
DZ608	DZA105R1L-	DIODE ZENER	MA 1051L (5R1)
DZ817	DZTZ33B---	DIODE ZENER	MTZ-33B
DZ823	DZZ13BL---	DIODE ZENER	UZ-13BL
DZ824	DZZ13BL---	DIODE ZENER	UZ-13BL
DZ825	DZZ5R6BM--	DIODE ZENER	DZ 5.6BM (AUTO)
IC1	14BK3577VR	IC REMOCON	14BK3577VR(DMC6003-001) S
IC151	1GD4052B--	IC.	GD4052B
IC201	1BA7790LSK	IC AUDIO	BA7790LS
IC301	1LA7423A--	IC VIDEO	LA7423A Y/C 1CHIP (NTSC)
IC302	1LC89960--	IC VIDEO	LC89960 1H CCD (NTSC)

NO	PART NO	PART NAME	DESCRIPTION
QD03	TZSR1004--	TR	KSR1004 (AUTO)
QS01	TZTA1266Y-	TR	KTA1266Y- (AUTO)(1015Y)
QS02	TZTA1266Y-	TR	KTA1266Y- (AUTO)(1015Y)
IC601	168KF4K9TS	IC MICOM	M37774M5H-134GP (F4K9TS)
IC602	1BA6209---	IC	BA6209
IC606	1MN1380L--	IC COMPARATOR (RESET)	MN1380-L(RESET IC)
IC701	1M34240M2-	IC DRIVER	M34240M2-011SP
IC702	1K1A7042P-	IC SWITCH	KIA7042P
i ICA01	1LA7411---	IC PREAMP	LA7411 2CH PRE/REC AMP
fNICA01	1LA7416---	IC PREAMP	LA7416 4CH PRE/REC AMP
ICS01	168K88E6ML	IC OSD	M35013-053SP (88E6ML)
Q151	TZSR1004--	TR	KSR1004 (AUTO)
Q153	TZSR1004--	TR	KSR1004 (AUTO)
Q154	TZTA1273Y-	TR	KTA1273Y(966Y)
Q155	TZSR1004--	TR	KSR1004 (AUTO)
Q201	TZTC3202Y-	TR	KTC3202Y (AUTO)(1959Y)
Q202	TZTA1273Y-	TR	KTA1273Y(966Y)
Q203	TZSR1004--	TR	KSR1004 (AUTO)
Q204	TZSR1004--	TR	KSR1004 (AUTO)
Q301	TZTA1266Y-	TR	KTA1266Y- (AUTO)(1015Y)
Q302	TZTC3198Y-	TR	KTC3198Y-(1815Y) (AUTO)
Q303	TZTA1266Y-	TR	KTA1266Y- (AUTO)(1015Y)
Q304	TZSA1177E-	TR	2SA1177E
Q305	TZTC3198Y-	TR	KTC3198Y-(1815Y) (AUTO)
Q306	TZTA1266Y-	TR	KTA1266Y- (AUTO)(1015Y)
Q307	TZSR1004--	TR	KSR1004 (AUTO)
Q602	TZTC3205Y-	TR	KTC3205Y (2236Y)
Q607	TZTC3198Y-	TR	KTC3198Y-(1815Y) (AUTO)
Q608	TZTA1266Y-	TR	KTA1266Y- (AUTO)(1015Y)
Q808	TKSD2058Y-	TR	KSD2058-Y
Q809	TKSD2058Y-	TR	KSD2058-Y
Q810	TZTC3198Y-	TR	KTC3198Y-(1815Y) (AUTO)
Q811	TKSD2058Y-	TR	KSD2058-Y
fNQA02	TZSR1004--	TR	KSR1004 (AUTO)
QD03	TZSR1004--	TR	KSR1004 (AUTO)
QS01	TZTA1266Y-	TR	KTA1266Y- (AUTO) (1015Y)
QS02	TZTA1266Y-	TR	KTA1266Y- (AUTO) (1015Y)

## COIL

NO	PART NO	PART NAME	DESCRIPTION	NO	PART NO	PART NAME	DESCRIPTION
L151	5CPZ100K02	COIL PEAKING	10UH 3.5MM K.(LAL02TB)	L605	5PB13857--	COIL BEAD	BI3857
L152	5CPX100J--	COIL PEAKING	PL 10UH J (TAPPING)	L606	5PB13857--	COIL BEAD	BI3857
L201	5CPX471J--	COIL PEAKING	470UH J RADIAL	L801	5PLFSQ2014	FILTER LINE	SQ-2014 40MH
L202	56Z223J402	COIL PEAKING	PC-6S-223J	L803	56C220K686	COIL CHOKE	22UH K 27.5X0.4D
L303	5CPX820J--	COIL PEAKING	82UH J RADIAL	L804	56C220K686	COIL CHOKE	22UH K 27.5X0.4D
L304	5CPX680J--	COIL PEAKING	68UH J RADIAL	LA01	5CPX150J--	COIL PEAKING	15UH J RADIAL
L306	5CPX100J--	COIL PEAKING	PL 10UH J (TAPPING)	LA02	5CPX680J--	COIL PEAKING	68UH J RADIAL
L310	5CPX330J--	COIL PEAKING	33UH J RADIAL	LA03	5CPX100J--	COIL PEAKING	PL 10UH J (TAPPING)
L312	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	LS01	5CPX150J--	COIL PEAKING	15UH J RADIAL
L601	5PB13857--	COIL BEAD	BI3857	LS02	5CPX688M--	COIL PEAKING	0.68UH 5MM M RADIAL
L602	5PB13857--	COIL BEAD	BI3857	LS03	5CPX100J--	COIL PEAKING	PL 10UH J (TAPPING)
L603	5PB13857--	COIL BEAD	BI3857	LS05	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
L604	5PB13857--	COIL BEAD	BI3857				

## SWITCHES

NO	PART NO	PART NAME	DESCRIPTION	NO	PART NO	PART NAME	DESCRIPTION
S701	5S50101Z90	SW TACT	SKHV10910A	S709	5S40101Z90	SW TACT	SKHV10910A
S702	5S50101Z90	SW TACT	SKHV10910A	5S751	5S10000002	SW JOG SHUTTLE	SRGPJJ-A3
S703	5S50101Z90	SW TACT	SKHV10910A	SM801	97PB394800	AUTO VOLT REGULATOR	SOPS-2020 AC85-138V
S704	5S50101Z90	SW TACT	SKHV10910A	SW151	5S30102102	SW SLIDE	HSW0938-01-010
S705	5S50101Z90	SW TACT	SKHV10910A	SW152	5S50101035	SW TACT	KPT-1112 1C-1P
S706	5S50101Z90	SW TACT	SKHV10910A	SW601	5S70101059	SW MICRO	SPPB62
S707	5S50101Z90	SW TACT	SKHV10910A				
S708	5S50101Z90	SW TACT	SKHV10910A				

## MISCELLANEOUS

NO	PART NO	PART NAME	DESCRIPTION	NO	PART NO	PART NAME	DESCRIPTION
F01	97PA4U2212	CORD POWER AS	UL/CSA YH396-42V	JP005	85801065GY	WIRE COPPER	L AWG22 1/0.65 TIN COATING
F801	5F1GB1521L	FUSE GLASS TUBE	UL/CSA TL 1.5A 125V MF51	JP023	85801065GY	WIRE COPPER	L AWG22 1/0.65 TIN COATING
G701	D8MT88GK--	DIGITRON(V.F.D)	8MT-88GK	JP158	85801065GY	WIRE COPPER	L AWG22 1/0.65 TIN COATING
GH01	97P2332700	HOLDER DIGITRON	PP	JP163	85801065GY	WIRE COPPER	L AWG22 1/0.65 TIN COATING
H701	1DHR38----	IC UNIT R/RECEIVER	DHR38 (FO=38KHZ) PREAMP	JP250	85801065GY	WIRE COPPER	L AWG22 1/0.65 TIN COATING
J151	97P6307500	JACK PIN	DSPM-8907-04	P202	97P8851210	CONN AS (Y51210)	2H-2S 100MM
JA01	HRF8000-EA	R CHIP	L 1/8.0 OHM 3216	P301	97P62M02BD	CONN B/B	53290 PLUG 2.0MM 13P
JP002	85801065GY	WIRE COPPER	L AWG22 1/0.65 TIN COATING	P501	97P6291736	CONN WAFER	TKC-M08P-B1
JP004	85801065GY	WIRE COPPER	L AWG22 1/0.65 TIN COATING	P601	97P6291741	CONN WAFER	TKC-M18P-B1

NO	PART NO	PART NAME	DESCRIPTION
P602	97P8810C13	CONN AS (Y10C13)	12H-12S 130MM
P603	97P6268700	CONN WAFER	00-8283-0312-00000
P701	97P6272000	CONN WAFER (ANGLE)	00-8283-1211-00000
P702	97P6269100	CONN WAFER	00-8283-0712-00000
P703	97P8810714	CONN AS (Y10714)	7H-7S 140MM
P704	97P62T04D4	CONN HOUSING	TOC ANG 1.25 4P
P801	97P62Y04X4	CONN WAFER	YW396 4P NC
PA01	97P6289590	CONN HOUSING	00-8370-041-000-800
PA01	97P6289620	CONN HOUSING	00-8370-071-000-800
PA02	97P62M01BD	CONN B/B	52418 RECEP 2.0MM 13P
PT01	97P6269000	CONN WAFER	00-8283-0612-00000
RF101	97P7606200	TUNER 3 IN 1	TMVH1-102B
S601	97P0S01300	SENSOR REEL	RPI-244
S601A	97P2332500	HOLDER REEL	SENSOR. POM
S602	97P0S01300	SENSOR REEL	RPI-244

NO	PART NO	PART NAME	DESCRIPTION
S602A	97P2332500	HOLDER REEL SENSOR	POM
S603	TRPT38PB3F	TR PHOTO	RPT-38PB3F
S603A	97P2332600	HOLDER TAPE SENSOR	POM
S604	TRPT38PB3F	TR PHOTO	RPT-38PB3F
S604A	97P2332600	HOLDER TAPE SENSOR	POM
T201	5604020001	COIL OSC	DEO-004
X301	5XE3R5795B	CRYSTAL QUARTZ	HC-49/U 3.579545MHZ 15PPM
X601	5XJ16R000F	CRYSTAL QUARTZ	ATS-49/U 16.000000MHZ 50P
X602	5XZR03276G	CRYSTAL QUARTZ	SO-26 32.768000KHZ 10PPM
X701	5PCST2R50M	RESONATOR CERA	CST2.50MGW
XS01	5XE14R318E	CRYSTAL QUARTZ	HC-49/U 14.318180MHZ 30PPM

